





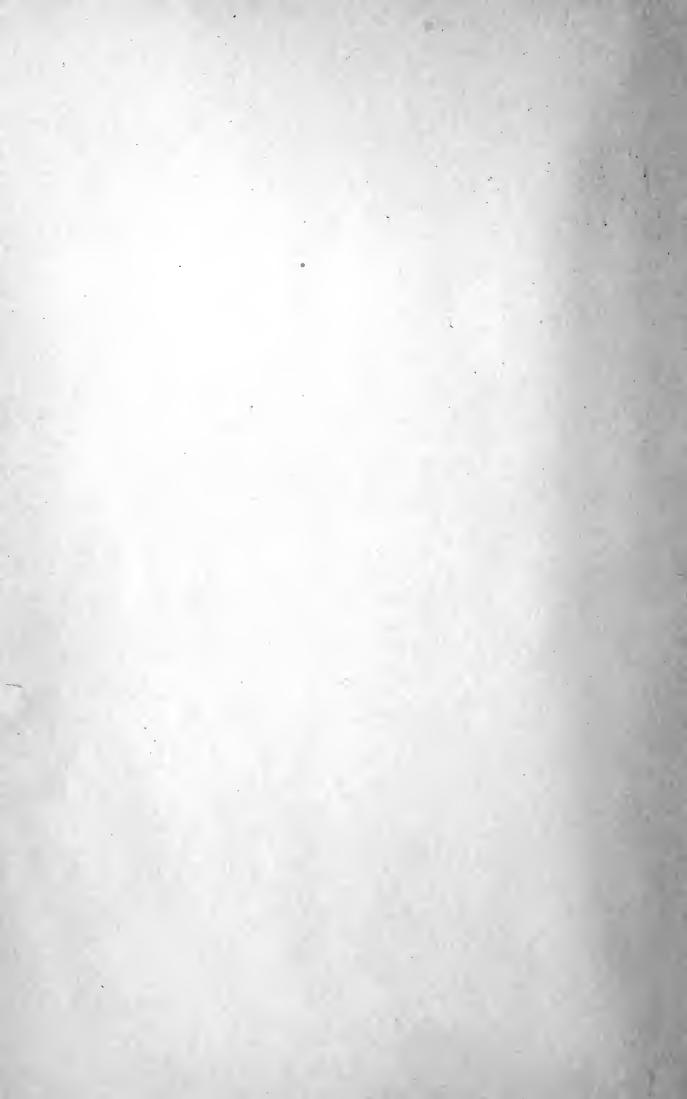






Ahkaarlaff

NOTES ON ARMS AND ARMOR



THE METROPOLITAN MUSEUM OF ART

NOTES ON ARMS AND ARMOR

ВҮ

BASHFORD DEAN

CURATOR OF THE DEPARTMENT
OF ARMS AND ARMOR

NEW YORK
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PREFACE

In the field of arms and armor The Metropolitan Museum of Art has hitherto published four handbooks or catalogues, viz.: Catalogue of the Loan Collection of Japanese Armor (Handbook No. 14), 1903, 71 pp., 14 figs. (Out of Print); Catalogue of European Arms and Armor (Handbook No. 15), 1905, 215 pp., 101 figs. (Out of Print); Catalogue of a Loan Collection of Arms and Armor, 1911, 85 pp., pls. i-xlvii; Handbook of the Collection of Arms and Armor, including the William H. Riggs Donation. 1915. 161 pp., pls. i-lxv [Edition I, January, Edition II, March].

Together with these appeared from time to time in the Museum Bulletin a series of notes upon various branches of the subject, mainly relating to accessions, but sometimes touching a wider field. Between 1905 and the present year, 1916, about fifty contributions are recorded, nearly all from the pen of the curator, some brief, some extended. As they were widely scattered, it now seems well to bring them together, with certain changes and additions in both text and figures, together with a hitherto unpublished article, for the use of those who are interested in armor and arms and in the activities of the Museum in this field.

Edward Robinson, Director.

April, 1916.



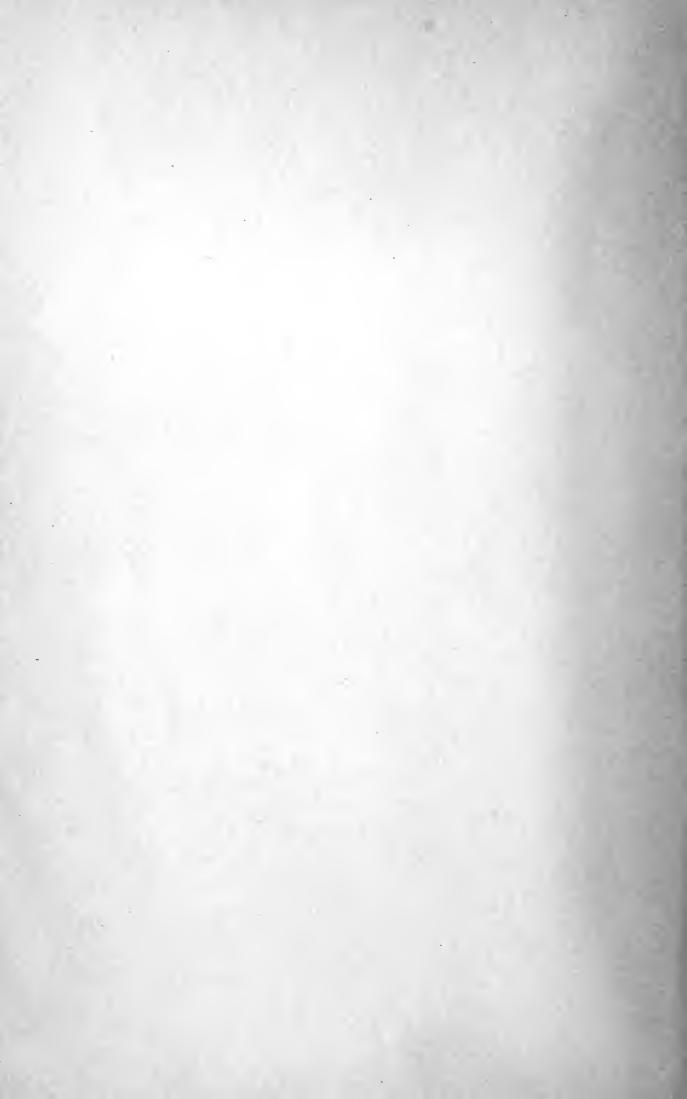
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NOTES ON ARMS AND ARMOR



NOTES ON ARMS AND ARMOR

I

CASQUES OF TIBETAN HIGH PRIESTS

HE recent expedition of the British to Lhasa has borne at least one kind of fruit, for it has extracted from forbidden Tibetan monasteries art objects of no common interest. Indeed, according to a well-known collector, more Tibetan objects have been secured during the single year past (1904) than during thirty years preceding. this may well be the case when we consider that the returning members (using the term "members" in its widest sense) of the Younghusband expedition brought back with them the portable treasures of several of the oldest and most conservative Lamaseries. Such objects, accordingly, are finding their way into the hands of the art dealers of Darjeeling, Calcutta, and Delhi, and thence through their correspondents into foreign collections. In recent months not a few excellent mandara (scrolls picturing the Tibetan pantheon) have been exported to Paris and Berlin; many curious gilded bronzes, temple ornaments garnished with turquoise, and many relics and reliquaries. Among the last may be mentioned such an object as the extraordinary cup formed of a saintly skull, recently presented to the Metropolitan Museum by Mr. Laffan; such also are aprons made up of elaborately carved bones, or drums formed of crania, or temple horns of which the resonant shafts are the arm-bones of righteous men!

Among the temple treasures have occasionally been found antique helmets, profusely decorated with Buddhistic symbols; and three of these, figs. 1 to 3, have re-

cently been added to the Museum collec-They were obtained by the curator of arms and armor during a recent visit to northern India, and are now presented by him to the Museum. They are made of copper, hammered out of single pieces, then incrusted with medallions; the latter, with brow bands and ear guards, were finally overlaid with gold. Their form is curiously archaic, and it is from this standpoint that they are of interest; for they suggest exotic influence, early Indian and possibly even Greek. Thus, the oldest of these priestly helmets, fig. 1, dating probably from the sixteenth century, has the broad crown and hood-like features shown in certain Graeco-Bactrian monuments; while the two remaining casques, with their tall crowns and narrow brow bands, suggest head-gear which appears in the (Jain) rock sculptures of southern India. Their decoration, on the other hand, is clearly Mongolian. The casque shown in fig. 3 dates from the late seventeenth or early eighteenth century, and is of the better class of workmanship; it is richly laden with Buddhistic figures, and here and there incrusted with crystal and turquoise. Unfortunately this specimen lacks the ear guards. These, however, are present in the third casque, fig. 2, which in all other regards is the least interesting. It is poor in workmanship, and is modern, dating from about 1800.

A helmet borne by a high priest suggests evidently an epoch in Tibetan history when the priest was a military no less than a ghostly ruler.

A JAPANESE SWORD-GUARD PICTURING A HOLLANDER

T is clearly recognized that the influence of Europe upon Japan during the seventeenth and eighteenth centuries was by no means unimportant. And even throughout the period when the restrictions upon the Dutch "factory" at Deshima allowed only a boat a year to dis-



JAPANESE SWORD-GUARD
PICTURING A HOLLANDER, PROBABLY
EARLY EIGHTEENTH CENTURY

charge its cargo in Japan, there continued a steady infiltration of European ideas and methods, no less than of trading stuffs.

In this connection it may be said that the collector who visits Japan is constantly coming in touch with early objects of European workmanship, or with early copies of them. One may see, for example, a bit of European flannel carefully worked into the case of some object precious in tea ceremonies; one may be shown among the treasures of a Japanese collector's go-down an eighteenth-century baize table-cloth, stamped unpleasantly in bright colors; in a

shop one may run across an early European button, brooch, painting, primitive watch, or bit of brocade. Among other European objects, decorated leather found its way into Japan at an early period, and was there highly prized. It was used not for screens—it was over costly for that—but as a veneer for tobacco pouches, small cabinets, and parts of armor. As I write, a pair of "sendan" (armpit pieces of a suit of armor) lie before me incased in leather of the coarse-patterned foliate type which was used as wall hangings in Dutch houses of the seventeenth century. And we have a suspicion that in this, as in similar cases, it was the old-fashioned objects, rejected by the markets of Europe, which found their way into the trading stocks of the India Company. This was certainly true in the case of European armor; for we have good evidence not only that it was imported into Japan, but that record prices were paid for it—and this after the European demand had subsided in consequence of improvements in fire-arms. Thus it is known that the helmets and corselets of daimvos were not infrequently of European origin, although, it appears, always remodeled after the Japanese fashion. One may mention in this connection the remarkable headpiece of the great Tokugawa in the temple museum at Nikko, the Dutch cabasset of about 1620, now in the Imperial Museum of Tokyo, parts of the suit of a daimyo of Arima in the possession of Mr. Louis B. McCagg of this city, and several headpieces collected by the writer. To these we may now (1916) add the admirable Dutch morion exhibited in the Brooklyn Museum.

Entire suits of European armor were undoubtedly imported. One, which was richly decorated, was secured not long ago by a collector in Tokyo, who sent it back to Europe, and it was later sold (1891) among



FIG. I



FIG. 2



FIG. 3

CASQUES OF HIGH PRHESTS, TIBETAN

THE METROPOLITAN MUSEUM OF ART

the objects of the Chateau Acquabella, Florence. I have myself found in shops in various parts of Japan fragments of etched and gilded German armor, which had been broken up to form ornaments for tobacco boxes!

Swords appear to have been rarely imported: their shape made them unsuited for Japanese use, nor was their material desirable—the native blades never having been surpassed.

It is a curious, and not altogether a flattering fact—from the western stand-point—that European figures or faces rarely find their way into sixteenth, seventeenth, or eighteenth-century Japanese art. Exceptional is the figure, probably of a Portuguese, pictured by Huish, in the Sir Trevor Lawrence Collection; and rare, also, are eighteenth-century prints which appear to have been based upon European models. Even among the thousands of richly decorated sword-guards of this period one seeks in vain for figures of Europeans. Such, at least, was the writer's experience, until he

happened to examine a collection of guards at Noetsu, in the province of Echigo. Here he discovered a guard decorated with a figure which the Japanese collector pronounced a "Corean," but which was an obvious Hollander. And it even tells us what manner of man was this early trader at Nagasaki: he wore a curly wig, a threecornered hat surmounted by a tuft of feathers, a broad-bottomed coat with silver buttons, a wide cuff, and ruffles at his throat and wrists. The tobacco pipe he carried is of Hollandish length, although its decoration is Japanese, and he led a spaniel, of the small, spotted kind, which was just becoming known in Europe as a "King Charles." The guard dates apparently from the early eighteenth century, and from its decoration we may query whether its material is the "namban tetsu," foreign iron, which at that time had become famous in Japan for the making of armor.

This tsuba was subsequently presented to the Metropolitan Museum.



DUTCH MORION, SEVENTEENTH CENTURY FROM JAPAN

A MODERN JAPANESE HELMET

DATED 1850

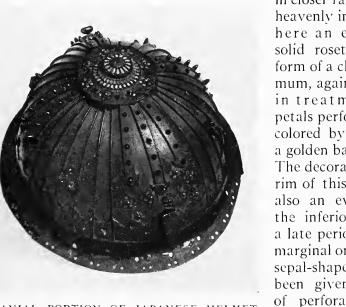
MONG the objects secured by the Museum from the collection of the late Heber R. Bishop is a Japanese helmet (only the cranial portion, or *bachi*) which has an exceptional interest to the student of Japanese armor. It is not only one of the

latest specimens of its kind, but, very rare in this decadent period, an admirable example of the art of the armorer. The bachi is noteworthy for a number of reasons. It recalls the head-pieces of the period Ashikaga $(1336-1600)^1$ in its shape, in the great rim in the region of the apical ornament, in its material, for it is exclusively of iron, in the archaic way in which the loops and pegs of the four dev ^ points are repre-

sented, and in the wide ornamental band (koshi-kumo) which passes around the bachi near and parallel to its brim. On the other hand, it has not copied quite accurately the early Japanese helmet, and further study brings out a number of features symptomatic of the latest period of armor-making in Japan: thus, on the four wide and decorated rays which span the bachi (which are simple in early specimens),

¹This suggests the revival of interest during the early nineteenth century in matters connected with early Japanese history. It was this revival which helped to abolish the shogunate and reëstablish the emperor.

there appears an ornamentation of plum blossoms expressed by perforations and colored by a background of tinselly gold. So, also, the apical ornament, instead of merely bounding a large central opening, the sacred *bachiman-za*, through which the mind of the wearer was believed to come



CRANIAL PORTION OF JAPANESE HELMET 1850

in closer rapport with heavenly influence, is here an elaborate solid rosette in the form of a chrysanthemum, again decadent in treatment, the petals perforated and colored by means of a golden background. The decoration of the rim of this rosette is also an evidence of the inferior taste of a late period; for the marginal ornament, a sepal-shaped ;a, has been given a series of perforated plum blossoms, which again mar the ancient de-

sign. The absence of a margin adjusted for a wide, down-bent brow-peak is also a modern characteristic.

There can be little doubt that the present head-piece was designed for a personage of the highest rank, possibly for a kugé, or imperial kinsman, for the sixteen-petaled chrysanthemum which forms here the central ornament could be borne only by the greatest princes; and the fact that few good arms were being produced at that time lessens the probability of its having belonged to a minor noble. Moreover, the wide ornamental bands bear no less than nine radial strap-shaped orna-

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ments¹, *shinodarė* (symbolized swords of Fudo, god of wisdom and mercy).

The following inscription appears in the usual position on the inner surface of the back of the *backi*, translated literally:

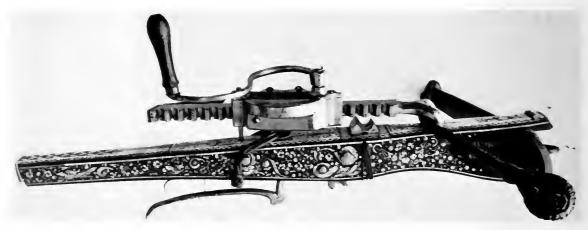
"In the former period Kaeai, third year, in the summer, sixth month, first

day (equivalent of June 1, 1850), of Prince Satsuma a Samurai, Fukita Tomotani this made."

As a specimen of the best workmanship of the latest Tokugawa period, the present *bachi* has no rival in the collections which the writer has examined in Japan.

IV.

OBJECTS FROM THE WILLIAM CRUGER PELL COLLECTION OF ARMS



CROSSBOW, PROBABLY TYROLESE LATE SIXTEENTH CENTURY

N the Room of Recent Accessions are shown a number of arms collected by the late William Cruger Pell during a long residence abroad and now presented to the Museum in his memory. Among these objects is a cross-bow beautifully inlaid, probably of Tyrolese workmanship, dating from the later part of the sixteenth century; with it is a bunch of well-preserved bolts, or quarrels, together with the winder by which the heavy steel

¹ It is hard to determine accurately the military rank indicated by these ornaments. Two of them appear on the helmet of an officer ranking about as a captain, four indicate a colonel, and six or seven, a general. But their use does not appear to have indicated fixed rank at all periods and in all provinces.

bow was set. Probably from the Tyrol but of somewhat later date is a wheel-lock rifle, also elaborately inlaid. These pieces are of excellent workmanship and, unlike the majority of objects of this kind, have suffered but little restoration. Somewhat similar in type to the foregoing are a brace of wheellock pistols of the early seventeenth century with knob-shaped handles, probably of south German workmanship. The present gift includes a number of halberds, powder horns and spanners, several court swords and pieces of armor, including morions from the Munich civil guard (about 1600).

The donor is Mrs. Ridgely Hunt, a daughter of Mr. Pell.

NOTE ON JAPANESE HELMETS

recently been added to the collection of Japanese armor. One of these, from the Burnett sale, is a deeply rounded war-hat, repoussé, from a single piece of iron. It is in the form of a resting "devil-fish" (octopus), with its

anese helmets, through which the head of the wearer was supposed to come into contact with heavenly influences. The present head-piece bears the inscription "Made in Yedo, Bushiu. Nagasone of Echizen." This is probably Nagazone Koyetsu, the well-known sword-artist who



JAPANESE HELMET, XVIII CENTURY

tentacles retracted. It dates probably from the late eighteenth century, and like many similar objects, is attributed to one of the great Miochin family of armorers. It lacks a signature, however. A second helmet, this from the Matsuki sale, is of admirable quality and is an example of the technical skill of the Japanese artist-armorer; the cranial portion is domeshaped, representing doubtless the sacred "egg," or the Buddhist tama, symbol of immortality; the apical point, however, has been developed into a rudimentary hachiman-za, an opening typical of Jap-

flourished about 1660, and prepared blades for the court of the Tokugawa shoguns. Of the same period (seventeenth century) is a helmet, Corean in style, with a low sugar-loaf dome, bearing the crest of the daimyo of Nambu. In this specimen, the brow-guard is formed in the shape of shells (awabé), and the surface of the cranial dome has been chiseled, leaving a delicate tracery in relief. A rare feature is the neck-guard of many delicate steel laminae, unlacquered. It is altogether of the best type of workmanship and is a valuable acquisition. A fourth helmet is

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poorer in quality and is apparently of later date (about 1750). But it is interlater date (about 1750). But it is inter-esting as a literal tour de force on the part in Japanese art as the symbol of the of the artist. The entire cranial portion

is of one piece, fashioned boldly as a mystery of generation.



WAR HAT, LATE XVIII CENTURY FROM THE BURNETT COLLECTION







SWORD-GUARDS, PRIMITIVE JAPANESE, EARLIER THAN 700 A. D.

VI

ACCESSIONS OF PRIMITIVE JAPANESE ARMS AND ARMOR

HE Imperial Museum at Uyeno Park, Tokyo, has recently sent to the Metropolitan Museum in exchange an important collection of primitive Japanese arms and armor. includes the best of the duplicates gathered by the governmental authorities of Japan during the archaeological explorations of many years and it is therefore an acquisition of uncommon value. And especially is it timely since the Museum's newly arranged exhibition of Japanese armor is inadequately represented in "primitives." The objects now received include, best of all, one of the very large two-edged bronze spear-heads (tsukushi-boko) characteristic of the region of Tsushima. They are exceedingly rare and of great antiquity, dating probably earlier than the Christian era, and prior to the period of burial mounds. The remaining objects are later, but antedate the year 700 A. D. They include armor and spear-points of bronze and iron,

early sword-blades, three important sword-guards, one of which is incrusted with gold, fragments of early scale armor and of a corselet: there is also a primitive helmet. Among horse trappings are a stirrup, bit, and cross-shaped (bronze) ornaments.

At the present time, then, the Museum's materials for illustrating early stages in the evolution of Japanese armor are reasonably complete; for, in addition to the foregoing objects, there are represented a well-preserved corselet of the "Jimmu Tenno period," several models of burial mound images (which came to be placed in the barrow in lieu of the attendants. horses, etc., of the dead personage), and a number of interesting horse trappings, including a saddle-bow incrusted with gold. Judged from these objects, the Japanese civilization of this early period was clearly of a high order, not inferior in its technical processes to that of contemporary western Europe.



DOUBLE-EDGED SPEAR-HEAD (TSUKUSHI-BOKO) 300 B. C. (?)

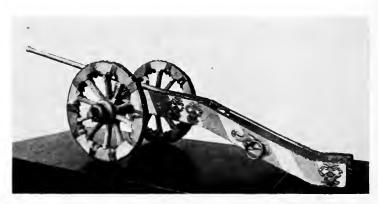
VII

GIFT OF A TURKO-AUSTRIAN CANNON TO THE COLLECTION OF ARMS AND ARMOR

HE Museum has recently received as a gift from a Trustee, Mr. Rutherfurd Stuvvesant, an interesting Turko-Austrian cannon, dating from the late seventeenth century. It possesses an original carriage, retaining its color, red and white, and reinforced with ornamental bands of wrought iron. Cannon of this type, as Baron Potier of Vienna points out, were used extensively during the epoch of the Turkish operations around Vienna: they are exceedingly small (5 ft. long and 15 in. high) and could be rapidly transported without the aid of horses even over the roughest mountain roads. It is so light,

in fact, that it could be drawn by a single soldier. The barrel is of Damascus steel and is decorated with a foliated design of silver, inlaid. It carried a ball only three quarters of an inch in diameter. Specimens similar to the foregoing are found in a number of European arsenals, and two specimens of the same type have recently been added to the collection of the King of Rumania.

The suggestion may be made that Turkish guns of the present light model were originally mounted on stocks as wall pieces and that they were arranged with guncarriages at a later date—late seventeenth or even eighteenth century.



CANNON, TURKO-AUSTRIAN SEVENTEENTH CENTURY

VIII

A GIFT OF JAPANESE SWORD-GUARDS FROM JAPAN

HE Museum has received a gift of three sword-guards from a Japanese samurai. Accompanying the gift was a letter a translation of which is here reproduced, not only as illustrating the kindly feeling of educated Japan for America, and the high esteem in which they hold their objects of

Then he requested me to sell him three of the number, but this also I declined doing.

"Subsequently he called twice upon me and again on the evening of the 20th of October, 1905, when he requested me to loan the three *tsuba* for a period of five years, to be exhibited in the Museum for educational purposes. This, however, I





SWORD-GUARDS, SIGNED KANEÏYÉ

art, but as a characteristic and interesting portraiture of the donor by himself.

"On July 29th in the 38th year of Meiji (1905), Prof. Bashford Dean, Curator of Arms and Armor of the New York Metropolitan Art Museum, together with Mr. Amakasŭ Isao, a student of law of the University of Kyoto, called at my residence in the latter city, and stated that he (Dean) had learned in Tokyo that I possessed a large collection of Japanese armor and arms and expressed his desire to be permitted to see them. I consented and thereupon brought out and exhibited to Prof. Dean various articles of armor, etc. Among the things shown were six tsuba made by Kaneïyé. These he asked me to sell him, but I declined to do so.

also felt constrained to refuse, vet when I reflected over the persistent zeal exhibited I could but admire the same, and considering that the request was on behalf of an American institution, while unable to consent to receive any compensation, I determined to make an offering of the desired objects rather than exhibit them as requested, and I stated that such was my desire. To the inquiry thereupon made by Prof. Dean as to my motive in this act, I replied: That at the time of the Tokugawa Shogunate I was a military attendant and resided in Osaka at the Castle. When I was vet a child eight years of age Commodore Perry came to Uraga, Sagami, for the purpose of opening our ports to foreign trade and commerce. A promise to that effect having been obtained by him from the then government, from that time on until the present Meiji period our intercourse has spread far and wide with all foreign nations, and that our honored flag should float today over all the seas was largely due to the friendly offices of the American Republic. Again during the recent conflict between the Empire of Japan and that of Russia—thanks to the warm and



SWORD-GUARD, SIGNED KANEÏYÉ

friendly attitude of the President of the United States in his successful action in putting an end to that deadly conflict by bringing about the Peace Conference at Portsmouth, with results yet to follow though still unknown—I felt much gratitude for the many and valuable services rendered by America to my country. So therefore when Prof. Dean continued to express so great a desire for some of the objects in my treasured collection, I consented to part with the same and send them to the Art Museum of New York as an evidence of my warm personal regard for the American people.

"Upon this, my statement to Mr. Dean, he was and expressed himself to be extremely gratified, and said that upon his return to America he would bring the same to the knowledge of his Government and that upon receipt of the necessary notification to be sent me by the Governor of Kyoto after a request to that effect by the proper Japanese officials thereunto moved by a communication from the Embassy of the United States at Tokyo, I should forward the articles offered.

"This was entirely satisfactory to me. Meanwhile as I was growing old and at any time I might be overtaken by death, I had the promise of those of my household surviving me to execute and fulfil my undertaking to the letter.

"On the morning of 21st October, 1905, Prof. Dean left Kyoto and returned the following year to his country passing through India. I saw him off from the Kyoto station, bidding him farewell.

"On the 26th of January of this year (1907) I received a communication from Ambassador Wright offering kindly to transmit through his office to America the three *tsuba* referred to herein."

(Signed) Goda Masaüji Samurai.

May, 1907 Japan, City of Kyoto.

The sword-guards were the work of the oldest and one of the most celebrated families of Japanese workers, or chasers, in metal, Kaneïyé of Fushimi, Yamashiro. The works of these artists are held in the highest estimation by connoisseurs, not only because of their intrinsic beauty, but also because they represent an important stage in the development of the art of the tsuba-makers, for it was in these guards that they first practised the art of inlaying the iron with the little lines of gold and silver, to produce the brilliant effect of these pictures in metal.

One of the sword-guards given by Mr. Goda represents a fisherman by the side of a cave, another shows us Fudosan and a willow tree, while on the third, perhaps the finest of them all, a kingfisher in a group of reeds is indicated with remarkable skill.

THE HALL OF JAPANESE ARMOR



N the new arrangement of the Hall of Japanese Armor, the effort has been made to represent not merely specimens of the armorer's art, but as far as possible the evolution of the art itself. this regard, curiously enough, the hall is apparently unique—not mere-

ly in collections in foreign countries, but even in Japan. Thus, in the sequence of forms represented the visitor may now follow the changes in the elaborate war trappings, which expressed in no small degree the art history of Japan, whether in metal, leather, or textiles, for a period of nearly two thousand years. In two cases near the entrance of the gallery are many important "primitives," mainly from burial mounds explored by the Imperial Government. These include arms and armor dating from the prehistoric period to about the ninth century A. D., swords, sword-guards, a superb bronze ceremonial spear, a nearly complete iron corselet, and iron helmets, most of these exchanged with the Tokyo Museum. From the ninth and tenth centuries there are fragments of corselets. From the eleventh century specimens of scales, leather and silken binding, taken, during its restoration, from one of the three harnesses of this period extant and obtained for the curator through the kindness of Professor Seki of the Tokyo Art College. Probably dating from the end of the eleventh century is a bit of the "votive harness of Hachiman Taro," which from its history may be authentic; it comes from his shrine at Utatsu. Of slightly later date are fragments of shoulder guards and from the period of about 1200 is an entire corselet and helmet, richly decorated and of the highest class of workmanship, doubtless the most important exhibit in the gallery, and later to be described in the Bulletin. The thirteenth, fourteenth, and fifteenth centuries are represented in considerable detail. Among the additions to these early objects are the corselets (haramaki-do and do-maru), descriptions of which have been published in Japan, from the collection of the veteran connoisseur, the late Professor Chitora Kawasaki of the College of Fine Arts, Tokyo. Also a beautiful many-colored (iro-iro-odoshi) corselet which has an interesting docu-



IRON JAPANESE CORSELET BEFORE 700 A. D.

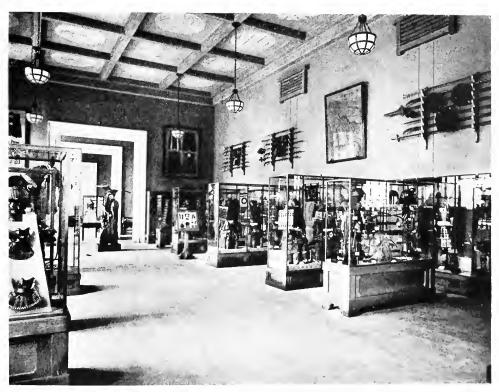
mentary history: it was given early in the seventeenth century to the Japanese general Shiraishi of Sendai by his daimyo Prince Daté Masamuné, and in the letter of gift it is stated that "the corselet was to be prized on account of its having been worn—by—Fujiwara-no-Hidéhira," well



ARMOR ATTRIBUTED TO FUJIWARA NO HIDÉHIRA



HALL OF JAPANESE ARMOR, 1916, LOOKING NORTH



HALL OF JAPANESE ARMOR, 1916, LOOKING SOUTH

THE METROPOLITAN MUSEUM OF ART

known as the teacher and friend of the heroic prince Yoshitsuné (twelfth century). Whether, however, the corselet actually belonged to the Fujiwara may be questioned, for the armor probably dates from the fourteenth century (it may, it is true, have been remodeled); but there can be little doubt that Masamuné believed the tradition. And from that time

represented in the collection; for of this period about ten harnesses and many headpieces, shoulder guards, and fragments are exhibited. Interesting among the accessions is a partial suit which was obtained about 1878 from the ancient monastery at Koya-San and was used by a warriormonk; this is a rare relic of the epoch of Nobunaga's wars with the monasteries.



CORSELET, JAPANESE, XIV-XV CENTURY FROM THE KAWASAKI COLLECTION

till the present it has remained an heirloom in the family of General Shiraishi. Indeed, it was only due to the intercession of the present head of the daimyo family of Sendai, Count Daté Kunimuné, that the corselet was finally ceded, "to show the people of America an adequate example of the armorer's skill in ancient Japan." With this corselet was obtained an ancient war-banner of the Daté.

In the sixteenth century decadence in Japanese armor had already begun. This can be traced adequately in the specimens During this century, it may be recalled, European trade came to establish itself in Japan, and there are now exhibited, dating from about this time, several portions of western armor which had been adapted to Japanese use.

The seventeenth and eighteenth centuries under the Tokugawa shoguns brought Japan peace and stagnant prosperity, and the trappings of the military class became ceremonial, often richly wrought and profusely decorated. Many specimens of these are exhibited, including a prince's



ARM DEFENSES OF A DAIMYO OF NAMBU XVII-XVIII CENTURY

suit (of one of the Sendai family) of about 1740. But the main effort has been to exhibit types, whether of breastplates, head-pieces, masks, arm and shoulder guards, especially the peculiar forms which the early Japanese works on armor selected for illustration. By their aid the visitor can reconstruct with reasonable accuracy the equipment of the noble or com-

moner who frequented yearly for a stated period the court of the shogun at Tokyo. The collection represents also the equipment of the horse of this period, and in a newly prepared case is the life-size model of the horse of a prince of Inaba (late eighteenth century) bearing the ceremonial harness, trappings, and great leading ropes, all in scarlet silk.



JAPANESE HELMET (HACHI)
XVIII-XIX CENTURY

A SPECIMEN OF EARLY JAPANESE ARMOR

HE most important object in the newly arranged hall of Japanese armor is undoubtedly the helmet and corselet of a princely harness dating from the "golden era" of Japanese art—seven centuries ago. For

oto, the ancient capital of Japan. Here it had been lost for centuries in a secret pantry of a kura (fire-proof storehouse) which had once belonged to a temple. It is indeed to this fact that the armor owes its present condition, for in its silken wrap-



EARLY JAPANESE ARMOR
AN O-YOROI OF ABOUT 1200

not only is it of intrinsic interest as armor, but it furnishes in its various parts examples of the extraordinary skill of the early artist in steel and bronze, of the silk-weaver and leather-worker, and above all the artist-decorator.

The present specimen was discovered about 1902 in a small village in the province of Tamba, within fifty miles of Ky-

pings, carefully packed in a lacquered chest, this in turn surrounded by a casing of straw, the armor has retained its original colors, together with its mountings of leather and silk. It is believed that the leathern casing of the corselet, with its pictured O-Fudo, is the only complete specimen of this rare period; so also the fastening loops and sword-holder are said to be unique.

The age of the armor can be determined with reasonable precision by comparison with similar objects of known antecedents which are preserved among the national treasures of Japan. And of these, which for the most part were illustrated about a century ago in the monograph on early Japanese armor given in the classic Shiuko-Jiusshiu (Ten Subjects of Ancient Art, 1797), there are four specimens which agree closely with the present one. One of these, the votive armor of Yoritomo, preserved in the shinto temple of Hinomisaki, dates from the end of the twelfth century. Another, of about the same date, was preserved until the early nineteenth century in the temple of Kurama and, judged from engravings, was so similar to the specimen now exhibited that there was at first a suspicion that the Kurama harness had been abstracted from the temple and not destroyed by fire.

With all of these specimens our present armor agrees closely in general design, in the size, shape, and peculiar flatness of the scales $(kozan\acute{e})$ of which the armor is made up, in the quality of silk cording and leatherwork, in the wide kusazuri, falling apron-like from the corselet, in the broad neck-guard of the helmet, and in the great ear-guards which roll outward from either side. But especially striking is the similarity in the quality of workmanship, the

finish and delicacy shown in the smaller details, e. g., in the metalwork, in the bindings inserted where the various patterns of leather meet, or in the designs of the stamped leather. These were stamped, it appears, line by line, not by a general block or through a stencil, as in later har-The leathern cover of the corselet showing O-Fudo (god of inflexible judgment) with the attendant figures, Seitaka-Doji and Kongara-Doji, is, as already noted, believed to be unique in its preservation. From the viewpoint of an artist it deserves the closest study. It shows, for example, the skill of the early designers, who with the fewest lines have been able to concentrate in their work so much life and movement. Witness, for example, the expression in the arms of the figures or the swirl of the flames around the head of the central deity.

The date of the present harness, granting always the accuracy of the date assigned to the similar specimens in Japan, cannot be much later than 1200 A. D. (first half of Kamakura period). For this determination we are indebted to the critics, Mr. Imamura, director of the Imperial Collection of Arms and Armor (Yu-shiu-kwan), and Professor Seki, of the Imperial College of Art in Tokyo, who were so good as to examine the armor before it was sent from Japan.

AN ACQUISITION OF EARLY BRONZE ARMOR

HE Museum has recently acquired by purchase a small but valuable gathering of early bronze armor; in all, six pieces—five casques and a corselet. The most important of these is a richly decorated casque

from a single spot. These, however, were of simple form and lacked the elaborate embossed decoration¹ of the present Italian specimen. The curious rods which are attached at the base of the triangular crest were fashioned for the support of some



CASQUE, BRONZE
ABOUT SEVENTH CENTURY B. C.

with triangular crest, dating not later than the seventh century B. C., which was excavated in Capua. This is one of the best of its kind and has already been pictured and described (von Duhn, Annali dell' Inst., 1883, p. 188, pl. N). This type of casque is one of the rarest and most decorative of early head-pieces; it is referred to as "Celtic," but it typifies the later bronze age of the epoch known most satisfactorily from the contents of graves in the region of Hallstatt. The present form of head-piece, moreover, is well known from the find at Falaise in Normandy in 1832, when no less than nine specimens were unearthed

good-sized ornament, probably in the shape of the wings of birds.

The corselet, excavated at Campobasso, is typically Greek in form and of the fourth century; it is of excellent quality and its modeling of the naked chest is worthy of the best period of Greek workmanship. From the same locality and of the same, or only slightly later date, is the casque with embossed ornament and heavy lateral bosses; it was evidently worn by an Italiote

¹According to Freiherr v. Lipperheide (Corpus Cassidum, 1902), there are known only six casques bearing the "Etruscan" ornamentation and having the crest and projecting rods.



ROMAN HELMET, BRONZE THIRD CENTURY B. C.



ROMAN HELMET, BRONZE THIRD CENTURY B. C. (?)



BRONZE PLASTRON, GREEK, FOURTH CENTURY B. C.



BRONZE BACK-PLATE, GREEK, FOURTH CENTURY B. C.

chief of high rank, since it shows traces of a golden wreath or crown. It resembles closely a specimen discovered about 1880 at Olympia.

The remaining casques are from southern Italy and Sicily. Two of these are Roman

of the second or third century B. C., and the last, Sicilian, which, although simple, is of the rare conical shape characteristic of an earlier period—probably the fourth century B. C.

XII A SEVENTEENTH-CENTURY ARMOR FOR HORSE AND MAN

ROM M. V. R. Bachereau of Paris, the well-known armor dealer, the Museum has lately obtained a complete harness for horse and man. It is probably of German workmanship and dates from the time of the Thirty Years War, as late possibly as 1630.

It is an example, therefore, of the latest type of workmanship, when the artist-armorer had been replaced by the fournisseur, but interesting none the less on this account; for it shows evidence that "improved" methods were in use and we know that evidence of this kind does not appear in harnesses of earlier date. Thus, as in the Louis XIII harness in the Artillery Museum in Paris, the metal bears the marks—which, by the way, are small and obscure—of having been spread out under heavy rollers, instead of having been stamped out of ingots of metal. And the metal shows, too, that the early milling was imperfectly developed since one finds that the slag which the metal here and there carried was sometimes rolled out in different directions indicating that the rollers were small, and that the plates were rolled repeatedly. In modern iron-steel, on the other hand, the process of rolling has been so developed that slag, if at all present in the metal, is pressed out as narrow bands ever in the same direction.

In the seventeenth century, it may be remarked, armor was rapidly becoming discarded; horse armor was rarely used, and even then it appears to have served rather for parade than for actual use. The present harness was set up in some early Waffensaal, apparently on the same carved

wooden horse-figure which displays it today.

For securing this interesting object the Museum is indebted to its former trustee and vice-president, Mr. William H. Riggs, now of Paris, well known to connoisseurs as the owner of the most important private collection of European arms and armor. It was he who expertised the present armor and gave his time generously in arranging for its acquisition. Its provenance and a few details are given in a letter from M. Bachereau.

"The armor was secured by the elder Bachereau at a sale held in Heidelberg in September, 1878; he was at that time associated with M. Henri, then the foremost dealer in arms in Paris, and M. Henri retained as his share of the purchases the present object. He sold it later to the painter, M. Lesrel, in whose possession it has remained up to this year . . . I have removed from it the trapping which had been added to it in later years, possibly while in the hands of M. Lesrel, and all the parts remaining are good (i. e., authentic) except the mail (modern) mounted on the neck, which is indispensable for the ensemble. At the suggestion of Mr. Riggs I have restored a plate which was lacking on the right knee, using for this purpose a fragment of an original armor. And at his suggestion also I have readjusted an arm-guard and the garde-reins, which had not been disposed correctly with respect to the cuirass."

The present harness will form the central object in the hall in which the Dino Collection is now exhibited.



ARMOR FOR MAN AND HORSE SEVENTEENTH CENTURY

HIZ

A GIFT OF EMBROIDERED YOKO-ZUNA (CHAMPION WRESTLER'S APRONS)

T may be true that in Japan the arts of the potter, the metal-worker, and the lacquerer have declined, but there can be little question that the embroiderers have advanced technically and that their skill in the treatment of themes in relief and in the use of metal threads is supreme. Whether the present artistic taste has kept pace with the advance in technical skill and judgment is, on the other hand, more open to question. Be this as it may, the Museum has recently received as a gift some wonderful specimens of Japanese embroidery, which in workmanship is the latest word in technical proficiency. The donor is Tanineman Hitachivama, the champion wrestler of Japan, samurai of Mito, who, making a tour of the world, has been pleased with the Museum to such a degree that he has presented his Yoko-zuna aprons to it.

To appreciate this gift at its full worth one must know certain of the elements of Japanese psychology and sociology; for the wrestler in Japan stands on a social basis quite different from that of the usual professional athlete; he must be an exponent of ancient samurai virtues, preeminently of the physical virtues, but not

neglectful of the sentimental ones. He must be proficient in courage, strength, judgment, activity, endurance, courtesy, magnanimity, and a host of other things, and he who has passed safely through the fiery tests which have led to championship¹ becomes a personage of no little importance *coram populo*—as the friend of princes and the prince of friends.

The present aprons are three: a lacquer one worn by the Yoko-zuna (Champion of all Japan), the others by his attendants, the Tachinochi (sword-bearer) and the Tsuvuharai (dresser). In them they appear in the ceremonial entrance when the wrestlers salute the audience. and from the importance of the occasion the aprons become vestments upon which admiring craftsmen lavish the most costly workmanship. Then, too, there is a mystical side to them, for a privilege sixteen centuries old allows them to be girded with the shinto rope. The present objects, it may be added, are possibly the most elaborate of their class—the trophy given by a large Japanese organization.

¹There are no less than a thousand companies of wrestlers in the various parts of Japan all competing for final honors.

XIV

THE REARRANGED ARMOR GALLERY

HEN the collection of arms and armor of the Duc de Dino-Périgord was purchased by the Museum in 1904, it was placed on exhibition in the gallery adjoining the room containing the Bishop Collection

time suggestions have been obtained from various European experts, and it was decided to adopt the "Riggs case," which is used in the private gallery of Mr. William H. Riggs, of Paris, and is the outcome of the experiments of many years. This case



COLLECTION OF ARMS AND ARMOR, GALLERY 3

of Jade. Here cases had already been provided and the objects were to be shown until a more suitable hall for displaying them could be secured. It was evident, however, that the armor in this collection, to say nothing of the decorated swords, daggers, and fire-arms, should be so exhibited that a visitor could inspect it at very close range and from all points of view. They were therefore to be given cases of appropriate height, which should not be placed against the walls, and which should be as light, dust-proof, and strongly framed as modern methods would permit. Since that

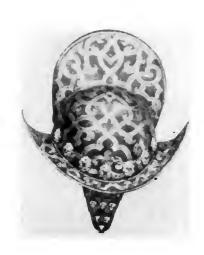
is raised about a foot from the ground and has a light metal frame, without ornament.

In the present rearrangement of the gallery the new cases stand about three feet from the walls, and are placed at intervals, so that a visitor may examine the objects from all sides. And a better background has been provided in the lighter colored (pearl-gray) walls with their decorations of trophies, war banners, and Gothic tapestry. In this last regard the Museum expresses its thanks to Clarence H. Mackay, Esq., who, learning what was needed, lent at once from Harbor Hill his suite of four tapestries.

These are of an especially appropriate period, the beginning of the sixteenth century, when European armor was about at its apogee; they represent courtly scenes (from the life of Louis XII and Anne of Brittany) in front of which armor finds an appropriate place. For the reopening of the gallery Mr. Mackay lent also the coronation sword of the Electors Palatine, Archbishops of Mayence (early seventeenth century), a half-armor, part of which belonged to Philip II, a casque by Seusenhofer (early sixteenth century), and a remarkable rapier.

In a neighboring cut appears a general

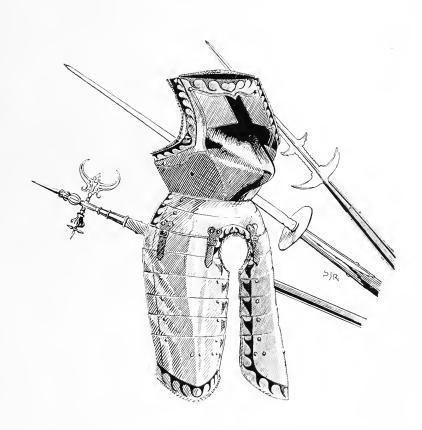
view of two sides of the gallery. It shows in the foreground the Louis XIII armor for man and horse acquired by the Museum during the year 1908; near the center of the picture are the Gothic harnesses, including one (second from the left, in the case containing four figures) borrowed from the Stuyvesant Collection, and directly in front are suits of armor of Maximilian's time, with fluted surfaces. Here again one of the specimens was kindly lent by Mr. Stuyvesant. For the present the smaller arms of the collection have not been placed on view pending the completion of suitable cases.



RECENT ACCESSIONS OF ARMS AND ARMOR

T a recent sale of arms and armor (the Whawell Collection) the Museum secured several desirable objects. Among these was a Swiss corselet of the Landesknecht type (about 1540), bearing the Swiss cross in its decoration, which is said to have been obtained by a Vienna collector, Herr Theel, from the arsenal of Lucerne. It deserves mention, because it is a form which is frequently illustrated and described, though none the less rare—like, indeed, all examples

of Swiss armor. Among the pole-arms secured are a number of unusual forms. Among them a Polish halberd of the late sixteenth century, a fourteenth-century poleaxe, a curious doubled korseke, and an ahlspiess (fifteenth century) with its original rondelle. Two early swords were obtained which fill gaps in the collection; one of them is a panzerbrecher (late fifteenth century), with a long handle, short-branched guard, and a long, stout blade, triangular in section.



A BRONZE CORSELET OF THE HALLSTATT PERIOD

RECENT accession to the collection of arms and armor is a bronze corselet of the "Celtic" or Italiote type, dating from the

The provenance of this corselet is not definitely known. Forrer assigns it to northern Italy or the neighboring region in France. It certainly differs from the speci-



BRONZE CORSELET V-VII CENTURY B. C.

fifth to the seventh century B. C. It is of great rarity (only seven specimens of this period appear to be known), and is in excellent preservation. It was at one time in the Forman Collection, and has been described and figured by Dr. R. Forrer (Reallexicon, p. 591), also in Urgeschichte des Europaers.

mens obtained in the Latium country which are known to the writer, and on the other hand it agrees closely with the three plastrons belonging to M. Constantin, which were discovered near Geneva (à Regnier) a few years ago. Its form is archaic, straight in the back and sides and low in the shoulders, representing an evolutional

NOTES ON ARMS AND ARMOR

stage which appears as well in armor of approximately the same period in Greece, Assyria, Egypt, and even in Japan (cf. the primitive cuirass in the hall of Japanese armor).

Noteworthy in the present corselet is the combination of the plastron and dossière in a single piece, which closed elastically on the body of the wearer. It was then firmly held in place by shoulder bands and by a wide belt, probably leathern, the place for adjusting which can be traced in the ornamentation. This ornamentation takes the

form of the series of tubercles deftly repoussé, usual in the work of the "Hallstatt" epoch: as shown in the illustration, they are grouped in rows and circles, arranged on the breast and shoulders and around the waist, suggesting lines of body-adornment (tattooing, scars, or paint-marks) worn by the primitive European.

With this corselet will be exhibited the remarkable crested casque of similar age, acquired by the Museum in 1907 (BULLETIN, vol. III, No. 2, here Article XI).



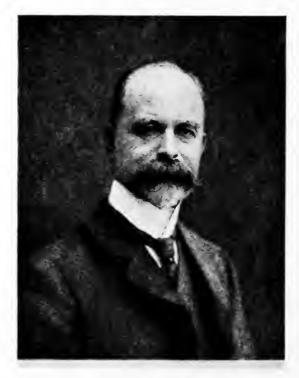
BRONZE CORSELET V-VII CENTURY B. C.

XVII

RUTHERFURD STUYVESANT

Ruther Continuously at the time of his death he shared with Mr. Joseph H. Choate the distinction of having served continuously as a Trustee of the Metropolitan Museum of Art from the date of its organization on

came its First Vice-President in February, 1905, an office which he resigned at the close of that year because of expected absence abroad. At the time of his death he was a member of the Committee on Paintings, a position which he had occupied continuously since 1903.



RUTHERFURD STUYVESANT, 1843-1909 FIRST PATRON OF THE DEPARTMENT OF ARMOR

May 24, 1870, to the present time. During this entire period he maintained an active interest in the affairs of the Museum, and his personal service was interrupted only by his frequent absence abroad.

During his thirty-nine years of Trustee-ship he served at different times on almost every committee of the Museum. He was a member of its Executive Committee from 1875 to 1885, and again from 1903 to 1906. He was elected Second Vice-President of the Museum in 1904, and be-

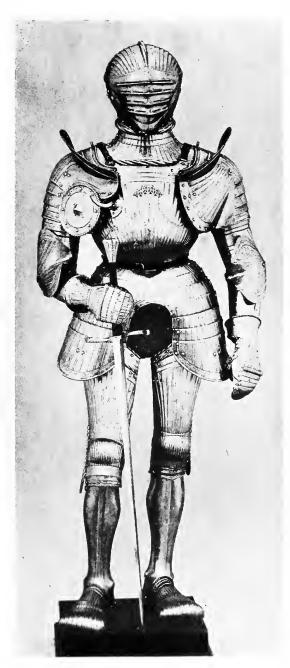
There was no department of the Museum collections in which Mr. Stuyvesant did not have an interest. His knowledge of art was broad and inclusive. He was especially interested in arms and armor and in paintings, in both of which directions he was an expert.

Mr. Stuyvesant was the son of Lewis Morris Rutherfurd, the astronomer. By the will of his mother's great-uncle, Peter Gerard Stuyvesant, property was left to him on condition that he change his name

NOTES ON ARMS AND ARMOR

to Rutherfurd Stuyvesant, which he was authorized to do by act of Legislature.

He was the representative of an old New York family, and was graduated from Columbia College in 1863. At the time of his election as Trustee of the Museum he was the youngest member of the Board.



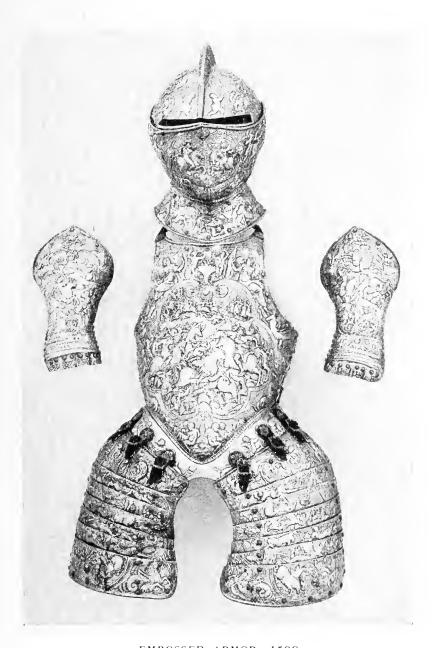
MAXIMILIAN ARMOR, 1515 STUYVESANT COLLECTION



HELMET, 1590 STUYVESANT COLLECTION



BACKPLATE, 1590 STUYVESANT COLLECTION



EMBOSSED ARMOR, 1590 STUYVESANT COLLECTION

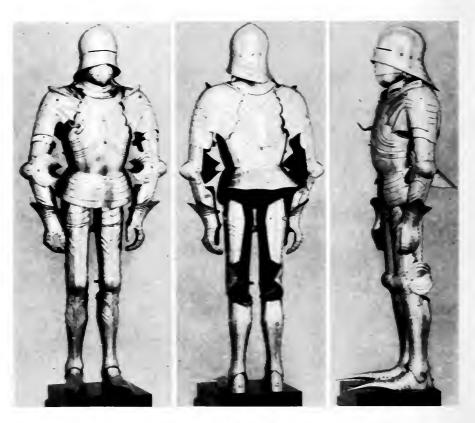
XVIII

RUTHERFURD STUYVESANT, FIRST PATRON OF THE MUSEUM COLLECTION OF ARMS AND ARMOR

earlier notice recorded the death of Rutherfurd Stuyvesant, a former vice-president and for nearly forty years a trustee of

Augustus van Horne Ellis. His interest was shown constantly through loans and gifts.

It is only fair to say that by the death of Mr. Stuvvesant there has been lost the



GOTHIC ARMOR. 1470 STUYVESANT COLLECTION

the Museum. It did not record, however. his services in establishing for the first time in an American museum a department of arms and armor, and in being instrumental in bringing to it some of the most interesting objects in this field; for it was he who negotiated for the collection of the Duc de Dino, and it was through his efforts that this was ultimately secured. He also recommended to the Museum the Ellis Collection which later was donated by Mr.

pioneer and foremost collector of armor in the United States. His studies in this field were begun in the sixties, a time when it was still possible to select objects of unusual importance; he traveled widely and was in close touch with museums and amateurs; he attended in person the more important European sales, such as the de Cosson. Londesborough, and Spitzer, and from these he bore away some of the principal objects. During a period of over forty

NOTES ON ARMS AND ARMOR

years his collection continued to grow, and it converted his family home "Tranquillity" at Allamuchy (N. J.) into a veritable museum, with vitrines of swords, daggers, and enriched armor, lines of panoplies, and complete harnesses, among which he aimed to retain only objects of princely class. There, too, is preserved his working library, which deserves especial mention. To enumerate the more important objects in his collection would be beyond the limits of this notice. He had, however, the early Gothic harness from the Spitzer sale, the half-armor said to have belonged to the Emperor Matthias, also

from the Spitzer Collection, the fluted harness formerly in the possession of Lord Stafford (these are now exhibited in the Museum), the Bredalbane claymore, the half-suit, etched and gilded, bearing the blazon of the Duke of Savoy, the early casques from the de Cosson sale, a remarkable series of chain-armor, fragments of armor of the fifteenth century, enriched swords of the sixteenth century, embossed plastrons and casques. . . . Mr. Stuyvesant did much to foster this branch of art archaeology and it will be difficult to fill the gap in the circle which his death has caused.

XIX

DEPARTMENT OF ARMS AND ARMOR THE UPKEEP OF THE COLLECTION

HROUGH the coöperation of Mr. Rutherfurd Stuyvesant, Mr. Clarence H. Mackay, and Dr. Bashford Dean, the Museum has secured for the coming year the services of M. Daniel Tachaux of Paris, a skilled armorer, who will be intrusted with putting in order the enriched objects, remounting harnesses, and making the necessary repairs in the collections of arms and armor. M. Tachaux has an interesting record: he has executed the repairs in some of the bestknown European collections, and he is, indeed, one of the few artists who preserve today the practices and traditions of the armorers' guilds of the Middle Ages; he is the pupil and successor of Klein, the Dresden armorer who settled in Paris in the time of the third Napoleon, and who in turn was the representative of a long series of German artist-armorers. M. Tachaux brings with him the *outillage* of his master, containing the most varied instruments, some of which have been used by generations of armorers, and are known in no other branch of metalwork. Thus, there are no less than two hundred varieties of hammers, and all of these, like armorers' implements generally, have their specific names, names which, by the way, are often unrecorded.

¹See No. XXIX, A Collection of Armorers' Implements, on p. 62.





ENRICHED BREASTPLATES
XVI AND XVII CENTURY
RIGGS COLLECTION

NOTE ON THE "CASQUE OF JEANNE D'ARC"

In only the rarest cases can ancient armor be attributed to historical personages, and it is clear that the "Casque of Jeanne d'Arc" which the Museum exhibits has little more than a legendary pedigree. Nevertheless, we have

received a letter from Mr. Andrew Lang, an authority on the history of Jeanne d'Arc, which bears upon this matter. The letter, from St. Andrews, Scotland, dated November 23, 1909, reads:

"Mr. Bruce-Gardyne has sent me a photograph of a basinet in your Museum, from Orleans, traditionally attributed to Jeanne d'Arc. At the siege of Jargeau, in June, 1429, her life was saved by her chapeline (a light head-piece without vizor) when a heavy stone knocked her off a scaling ladder. From largeau she went to Orleans for two or three days and she

might naturally have dedicated the chape-line.

(Proces: vol. 111, pp. 96–97.)

"The coincidence is curious: we do not on any other occasion hear of her wearing a vizorless head-piece."

In this connection we may add what Baron de Cosson has written of this basinet. (Le Cabinet d'Armes de Maurice de Talleyrand-Perigord. Paris. Rouveyre, 1901.)



VOTIVE "CASQUE OF JEANNE D'ARC"
IN THE MUSEUM COLLECTION

"It is a French basinet dating from the end of the fourteenth or beginning of the fifteenth century. It retains part of the small chain which denotes that this casque has been suspended as an *ex voto* in a church. A heavy dent in the region of the

left cheek may well have come from a warhammer (bec-de-corbin), and two others on the right cheek appear to have been the result of lance thrusts. According to information obtained by the Duc de Dino, it seems that this basinet formerly hung above the main altar in the church of Saint Pierre du Martroi, at Orleans, where it passed as having belonged to Jeanne d'Arc."

As the case stands, we are convinced (1) that the casque is French, (2) that it is of the period of Jeanne d'Arc, and (3) that it bears marks of contem-

porary service. In the last regard the evidence is satisfactory: for one reason, the injuries clearly antedate the ancient rusting of the head-piece. This, then, makes it probable that the object was preserved because it was an ex voto—an assumption still more probable by reason of the fragment of chain which is attached to it—the condition of the ancient rivet showing clearly that its attachment to the basinet was primitive. It next remains to be proved that the casque for-

merly hung above the main altar in the church of Saint Pierre du Martroi, at Orleans, and it would be interesting to confirm the observation which is reported to have been made by the Duc de Dino. that the links of the chain now attached to the basinet agree with those said to be still hanging in the church. But even granting this provenance of the casque, it vet remains to be demonstrated that the ex toto belonged to the maid and not to one of her officers. Unhappily, too, the casque can hardly be the "chapeline" referred to in the record which Mr. Lang cites, at least if the contemporary term was accurately chosen, for a chabeline is well known to have had a brim, while the present casque is a typical basinet which has merely lost its mé;ail. or face-guard. Moreover, its injuries were not caused by a crushing stone, but were effected by pointed

weapons, one of them possibly a crossbow

It is unfortunate for our present purpose that there is no contemporary portrait of Jeanne d'Arc which would give us a reasonably accurate picture of her armor. The earliest portrait hitherto known (it has been cited by Mr. Lang in his life of Jeanne d'Arc) dates sixty or seventy years from the time of her death; and its armor is of this late period, with an armet, florid epaulières, and tassets. No better evidence is forthcoming in a second miniature (also on parchment) which dates from a slightly earlier period, and is now in the collection of Mr. Jacques Reubell in Paris. In this we observe that although the armor is unlike that in the first miniature, the face is the same, strongly suggesting that the early artists were familiar with an authentic portrait of Jeanne d'Arc.

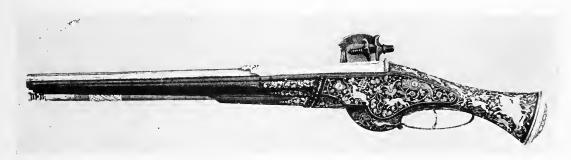
XXI

A SEVENTEENTH-CENTURY WHEELLOCK PISTOL

MONG recent accessions in arms and armor is a seventeenth-century wheellock pistol of extraordinary workmanship. It is of the short-handled form typical of the period. Its barrel is slim, and is incased for nearly half its length in decorated gilt bronze. The stock is of pear-wood, closely ornamented with fine gilt wire, in a pattern of foliage and traceries, and further enriched with a number of inset silver plaquettes which picture mounted huntsmen,

a signature and date: inside the lock plate, modestly hidden by the artist, appears "Felix Weeder, fecit in Zurich, 1630" (possibly 1639).

Pistols of this type and period are not uncommon, but it is rare to find one richly ornamented. Those best known to the writer are in the museums of Vienna, Stockholm, and Turin, where examples, especially of Brescian workmanship, are preserved. The specimen next in importance to the present one, so far as can be discovered, is



WHEELLOCK PISTOL, SEVENTEENTH CENTURY

armed with pistols, urging their hounds on deer, hare, and boar. On the butt there is an engraved plaquette depicting a huntsman in buff coat with slashed sleeves, and with wide hat and feather. The rim surrounding the butt is of copper gilt, as well, also, as the trigger, lock plate, and wheel guard; all of these are executed with great care. Worthy of especial notice is the foliate ornamentation deeply engraved on the lock plate; even the back of the lock, which is normally buried in the wooden stock, is found to be richly decorated. Similar engraving appears on the steel parts of the pistol—the hammer and the side of the wheel, a detail of which is shown herewith. On the other hand, the trigger guard is not equal in workmanship to the adjacent parts, and is probably a contemporary repair. It is fortunate that so good an example of the armorer's art bears

in the royal collection at Turin, where it bears the number 659. In this the lock plate is almost undecorated, and the plaquettes are of nacre.

In arms, as in other art objects, it is usually difficult to trace ownership farther back than a few decades; if of great value—and arms have been valued highly for over a century—they have changed hands quietly and frequently. It is noteworthy, therefore, that we are able to tell something of the history of the present arm.

It belonged to the late Canon Harford, of Westminster Abbey, and his account of it is at hand. In his MS. we read: "This wheel-lock pistol was bought by Charles Joseph Harford, M.A., F.S.A., J.P., of Stapleton Park, Gloucestershire, about 1790, of a Scotch nobleman, in whose family it had been handed down as having been in the celebrated collection of King Charles

the First. It is now in the possession of his grandson, the Rev. Frederick K. Harford, M.A., F.S.A., of Westminster Abbey. . . . No specimen in the Ambras or the Dresden collection approaches it for exquisite beauty of workmanship. It is of German-Swiss workmanship—Basle or Nuremberg." The last is not a bad diagnosis, as diagnoses go, but he would have been closer to the mark if he had removed the lock and found the signature. It appears further that the elder Harford showed his purchase to his friend, Sir Walter Scott, and the Antiquary "thought it was probably presented by Prince Rupert to his cousin, King Charles the First." This is certainly a more interesting pedigree than most objects have, and were it not that the modern investigator has a deep-rooted suspicion of pedigrees, it would be easy to find in the present case additional indications of a royal provenance. The quality of the object marks it at once as having belonged to a great personage; one may find in the foliate decoration of the stock, the thistle, the rose, and the shamrock, and to make more probable the idea that the object was prepared "in order" for King Charles, one might even convince himself that the figures of the plaquettes are portraits (or as nearly portraits as a foreign artist could make them) of the king him-Add to all this that Prince Rupert was particularly interested in the royal collection of arms, having been keeper of the armory, and finally that the royal collection was dispersed after the Civil War. It is, therefore, well within the range of probability that such an historical arm might have foundits way into the possession of the Scottish family, as noted by Canon Harford.¹

¹A pistol of the same type as the preceding signed "Felix Weerder," occurs in the Stuyvesant Collection. See Memorial Catalogue of Arms and Armor of Rutherfurd Stuyvesant, [privately printed, 1914], pl. XLIV, p. 136.



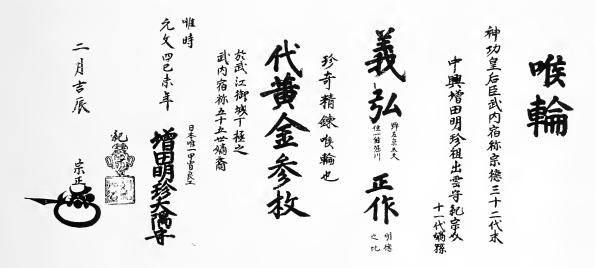
WHEELLOCK PISTOL (DETAIL)
SEVENTEENTH CENTURY

XXII

RECENT ACCESSIONS OF ARMS AND ARMOR

R. GEORGE M. LEFFERTS has recently presented to the Museum his collection of Japanese arms and armor, including twelve complete harnesses, accessories, swords, and shafted weapons, together with numerous books of reference. These were collected by Dr. Lefferts in Kyoto and Osaka about twenty years ago, and, on his return to this country, were carefully

other certificate relates to a fifteenth-century harness designed and executed by Hoshi-hiro. Each harness is of high class. One is of the generalissimo type, of gilded laminae, corded with scarlet silk; two are corded with purple silk, as in armor of highest daimyos; and several have helmets with large ear-pieces and wide and deep shoulder guards, which serve as marks of quality. In a number of instances the



AN ARMORER'S CERTIFICATE OF AUTHENTICITY

catalogued and exhibited at the Union League Club (1893)—the first important series of these objects, we believe, placed on view in the United States. The armor is mainly of eighteenth-century workmanship and of excellent design. Two of the suits, wrought by members of the Miochin family of artist-armorers, are accompanied by certificates of ancient experts. One of these documents, dated 1738, states that part of the armor belonged to a certain prime minister; that the casque was made by Miochin Masuda (of the thirty-second generation of Miochin) of Izumo; the remainder of the suit by (Miochin) Muneyasu (tenth generation) in the year 1352. The objects bear inscriptions indicating the part of Japan in which they were made and under what daimyos—data particularly important to the student of armor who seeks to follow the changes in design.

Still another suit of Japanese armor has lately come to the Museum by the gift of Mr. Marshall C. Lefferts. It is of modern form, dating probably from the first decade of the nineteenth century, and has with it several accessories hitherto unrepresented in our gallery.

Mr. William H. Riggs, of Paris, a former trustee and vice president of the Museum, has lately enriched the collection with several Oriental arms. These include a

Turkish saber of the seventeenth century, with silver mountings; a Rajput *tulwar*, eighteenth century, ornamented in silver gilt, and a Rajput double-pointed dagger, a kind of *adargue*.

An important series of fire-arms of the eighteenth century and the first decade of the nineteenth has been lent by Mr. Frederick Sherman Rook. This includes

works of the most famous artist-gunsmiths of the epoch, among others, Boutet, Pirnet, Barzabal, Le Page, Hollandais, and Lazarino Cominazzo. All are of finished workmanship, elaborately decorated, and in perfect condition. Many are preserved in their original cases and appear rarely to have been discharged.



XXIII

LOAN EXHIBITION OF ARMS AND ARMOR, 1911

HE Museum has arranged to ex- great collections which have been dispersed

hibit, during February and March of the coming year (1911), a collection of arms and armor selected from the cabinets of American amateurs. It is planned by this means to illustrate to what degree collectors have succeeded in bringing to this country important examples of European arms.

Among those whose collections have been placed at the disposal of the Museum are Amory S. Carhart, George J. Gould, Edward Hubbard Litchfield, Clarence H. Frank Gair Mackay, Macomber, Ambrose Monell, J. Pierpont Morgan, Howland Pell, T. J. Oakley Rhinelander, Mrs. William Rhinelander, Frederick Sherman Rook, Cornelius Steven-Madame Ruther-Stuyvesant, Bashford Dean.

An illustrated catalogue will be published.

The loan exhibition of mediaeval arms and armor already announced, bids fair to be of interest to general visitors as well as to special students of these objects of art. A

CORONATION SWORD FROM THE CLARENCE H. MACKAY COLLECTION

number of arms will be shown which take high rank in their class, representing the during the past sixty years, such as the Meyrick, Londesborough, Spitzer, Zschille, de Cosson, Hefner-Alteneck, deBelleval, Richards, and Osuna collections.

Some of the objects are of historical importance, as the remarkable coronation sword of the electors of Mavence, and parts of a harness which belonged to Philip II. Others have great artistic merit, as the casque from the collection of the Duc de Luvnes. Excellent technique is represented in the work of the artist-armorers Colman, Wolf, Seusenhofer, Missaglia, Negroli.

The exhibition will be held in Gallery E 11, in which the loan collection of rugs is at present shown. The walls will be hung with early tapestries selected to illustrate military costume. About thirty suits of armor are to be displayed, and of these four will be mounted as equestrian. Halberds, swords, tirearms, and various detached pieces of armor will appear in panoplies on the walls of alcoves devoted to classified objects.

According to the plan adopted, the visitor enters the gallery from the west door,

and, making a tour of the room, traces the development of the subject chronologically. He first examines objects dating from the fifteenth century, the earliest period from which mediaeval armor is apt to be preserved (a few specimens only are shown which date from the late fourteenth century). In this section he will find no less than nine Gothic harnesses. Next, he inspects a number of Maximilian, or fluted harnesses, which date from 1500–1530. He then turns to a series of armored figures dating from 1530-1630, selected as typical of this period, some enriched by etching, gilding, and embossing. The general arrangement is synoptic, designed for the student of this branch of archaeology, but the objects themselves are selected with especial reference to their merit as objects of art, in beauty of form, quality of workmanship, and enrichment.

Several special groups of arms will attract the attention of the general visitor. Thus, a panoply will be arranged showing rare Highland arms. Among these a suite of backswords will be lent by Messrs. Alexander McMillan Welch, Edward Hubbard Litchfield, and William B. Osgood Field. The remarkable claymore—the primitive claymore, double-handed, with downbent quillons—of the Earls of Bredalbane will be contributed by Madame Rutherfurd Stuyvesant, and a very important dirk, probably dating from the sixteenth century, by Mr. H. G. Keasbey.

An outcome of the present exposition, it is hoped, will be a fuller appreciation of the armor of earlier periods, let us say between the

years 1450-1530. The armor of later date, representing in general nine tenths of the specimens usually seen, is apt to be decadent, heavy, and inelegant, sometimes interesting only from the decoration which it bears.

The exhibition would not have been possible without the generous coöperation of nearly all collectors of armor in the United States—not a great number at the most—about a score contributing. The total number of objects will be two hundred. An illustrated catalogue will be issued with a view to providing a better record of the arms and armor in American collections.

The loan exhibition of European arms and armor, which opened on February sixth, has already been largely attended, and it seems to have found favor with visitors of widely different interests. Its educational value, for example, in the teaching of the history of the Middle Ages, is evidently appreciated: classes from the city high schools have attended en masse, and visits have been paid by schools of many kinds. It is noticed also that the scholars find much to interest them, since they remain a long time among the exhibits. The collection has, as was expected, appealed to the rather wide circle of art-lovers who are interested in mediaeval antiquities, who appreciate the quality of the armor shown, and who realize that an exhibition of this kind has never before been viewed in this country, and may not soon again be brought together.

It is arranged to continue the exhibition until April sixteenth.

LOAN COLLECTION, 1911

XXIV

ACCESSIONS IN ARMS AND ARMOR: SWORDS AND A VENETIAN SALADE



VENETIAN CASQUE (BARBUTE) XV CENTURY

NOTA-BLEgift to the Department of Arms and Armor was lately made by our President, Mr. J. Pierpont Morgan. It consists of five objects obtained by him during a visit to Rome in the spring of 1911: a North Italian head-piece and four swords, each of these admirably representing the art of the armorer.

The head-piece dates from the end of the fifteenth century and is an example of the deep, close-fitting salade, or barbute, well known in paintings of the period, but rarely seen in collections. It is of the form perfected in Milan in the ateliers of the famous armorers, Missaglia, whose initial, with the mark of double proof, occurs in similar specimens. In this regard, however, the present barbute cannot readily be examined, since it is completely inclosed in a casing of velvet. This form of textile garniture is retained in but few examples of early salades. It is usually referred to as Venetian, since it appears in the head-pieces of the doge's guard, where it seems to have been retained in use for more than a century, in many cases furnished with elaborate ornaments in gilded bronze. In the present example, the red velvet garniture is margined with galloon, and topped with a crest of gilded bronze, a demi-lion rising from a crown.

Of the four rapiers included in Mr. Mor-

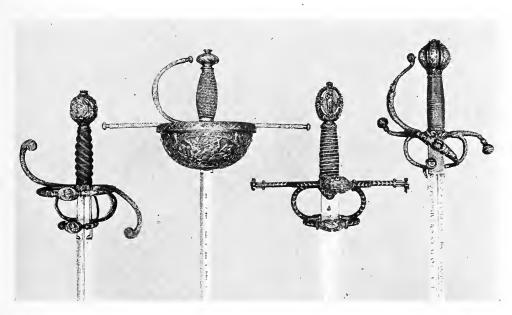
gan's gift the most modern dates about 1625. It is in Spanish style with a solid. cup-shaped guard. The latter, however, is certainly of Italian workmanship, for it bears the signature of Carlo Piccinino, one of the later members of the distinguished family of Milanese armorers and swordsmiths. The hilt is, in fact, the most beautiful of this type which the writer has seen. It is boldly chiseled, showing trophies and combats, framed as medallions in wreaths of laurel. The chiseling is in high relief, carried out with remarkable delicacy in details. The border of the guard, which expands like a brim, is bent down so as to lie close to the margin of the cup, thus forming a deep crease which served to catch the point of an antagonist's rapier. This deepcreased border is chiseled admirably with a wreath of laurel held together by fillets, a motive seen on other parts of the hilt as well as on the quillons and the branch. There also appears a mascaron, in true North Italian fashion, in the region of the base of the blade. The latter is of Solingen workmanship.

Two of the long rapiers date from the end of the sixteenth century. One of them is Italian, its hilt richly gilded and decorated in a style of strap-work and medallions. Its pommel is of massive elegance, its design including a series of four-sided bosses which catch the light at many points. The quillons are curved, one forward and one backward, each terminating in a grotesque head. The guard is of annular type, a large ring arising from the base of the quillons, and a small ring extending outward from the end of the pas d'ane. The second sword of this period has a hilt gilded and richly sculptured in steel. In its decoration occur many types of grotesque heads, of which two with interlacing horns form the central ornament of an oblique guard. Its design

NOTES ON ARMS AND ARMOR

exhibits the skill of the swordsmith, especially in the use of depressed areas, trenches, and perforations, which give contrasts in color of great decorative value in the scheme of decoration. The blade of this sword is of a slightly later date than the hilt; it is probably French and bears the inscription: QVI CON COVES OFFENCERA+MON MAISTRE OV SA DAME+ME FAVLT DE SON CORPS+SEPARER L'AME. The present specimen suggests the rapier pictured in Skelton's Meyrick, plate CVI, but is of richer ornamentation.

The fourth sword dates about 1550. The blade is broad and bears the Toledo mark. The quillons are straight, the guard annular, the pommel flattened, large, and elliptical. The hilt is decorated with medallions richly gilded, framed by strapwork incrusted with silver; its general color appears to have been russet, against which a parallel series of close-set silver chevrons appears in bright relief. From its exquisite design and workmanship this rapier may well have been borne by a personage of the highest rank.



RAPIERS, XVI AND XVII CENTURY

XXV

AN ASSYRIAN SWORD



ANTELOPE
DETAIL FROM THE
ASSYRIAN SWORD

GIFT received lately from Mr. I. Pierpont Morgan, is an Assvrian sword of rare interest. It is, in fact, the only specimen of its kind, the primitive bronze Sapa-ra, of which the writer has been able to find any record, although its type is well known in Assyrian monuments. notably cylinders, on which the god Maruduk is shown

fighting with a dragon. The present sword is well known to archaeologists and was long exhibited in the Assyrian gallery of the British Museum. It has several times been figured, as in Burton's Book of the Sword, p. 208, or in the Transactions of the Society of Biblical Archaeology, vol. IV, p. 347. It was obtained about 1875 by an English explorer, Colonel Hanbury, at Nardin, where it had been in the possession of Arabs. Nothing is known of its earlier history.

Among bronze swords it merits high rank in beauty of workmanship; the blade is slender, single-edged, and its outline is gracefully rounded down (forward) from the produced straight tang; its surface is delicately curved from back to edge. In form and in size—it is twenty inches long—the sword suggests the bolo of the Malayan peoples, a case of evolutional convergence, doubtless, but a curiously complete one, even to the balance of the blade and the form of the handle. On the other hand, its similarity to the Phoenician short sword is less apt to prove a case of parallelism,

especially since the Phoenician form is the more highly specialized, a condition which could have been predicted from the time relations of the kindred peoples, Assyrian Phoenician. Ιt was excellently planned as a chopping sword, and could have been used formidably with a short forearm stroke. Its workmanship is excellent, as in the quality of the surfaces, in the grooving, in the precise and graduated margins of the handle, in the regularly and boldly executed cuneiform characters, above all, in the grace of design of the little incised ornaments (resting antelopes) which appear on the sides of the blade.

The characters have been read and each of the three inscriptions is the same; the first, on the left side of the blade, the second on the right side of the base of the blade, and the third, on the back of the blade, read: "The Palace of Vul-niari, King of Nations, son of Budil, King of Assyria, son of Belnirai, King of Assyria." The sword is thus important as an historical document, giving as it does the names and relationships of three Assyrian rulers who reigned during the fourteenth century B. C. in the capital of Assur (Kelch Shergat), a region from which it was obtained.

The sword was believed by Mr. Boscawen, who first called attention to it, to be a temple piece, and "probably placed in the hands of a statue, perhaps one of the god Maruduk." But we are convinced that the sword was not a mere decorative piece, for its accurate balance, its rounded surfaces and corners, and its careful finish all speak in favor of its having been used, and by one to whom the artistic finish of the arm was second in importance to its actual value in battle. Its hilt originally contained on either side a plate of some material, possibly hard wood, metal, or ivory, which formed the sides of the grip, these held in place by

NOTES ON ARMS AND ARMOR

inbent margins of the metal. There is no evidence of the "richly jeweled hilt" of which Mr. Boscawen writes—but without this the sword is easily an object of highest rank.

The early bronze sword, presented to the Museum by its President, Mr. J. Pierpont

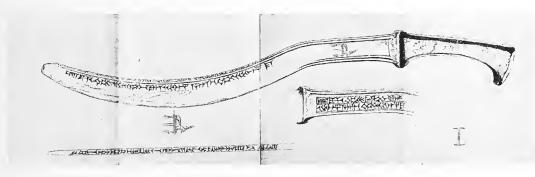
was then referred to as of decorative interest merely, is, according to Dr. Frothingham, to whose interest we are indebted for the foregoing corrections, a "divine symbol set upon a standard (or an altar) such as one sees on the Babylonian boundary stones, where animals connected with altars are emblems of various gods of the Pan-



ASSYRIAN SWORD, XIV CENTURY B. C.

Morgan, and described in the January number of the Museum Bulletin, has lately received the attention of several Assyriologists, who have commented on its value, both from historical and palaeographical standpoints. The Museum is greatly indebted to Professors Prince, Frothingham, Clay, and Vanderburg, who have contributed a more modern

theon. . . . Here it is probably the emblem of the god Raman, which lies at the basis of the king's name and whose protecting deity he was." In confirmation of this note one recalls the use of similar symbols, e. g., gazelle, ox, rat, tiger, peacock, in the religion of India at the present time. One notes, also, that the antelope is apparently resting upon an altar, from



ASSYRIAN SWORD SHOWING INSCRIPTION

rendering of the cuneiform inscription. It reads:

E-kal—Adad-Nirâri šar Kiššati apal Pudi-ili šar mat Aš-šur apal ilu Bêl-Nirâri šar mat Aš-šur-ma.

("The palace of Adad [or Raman] Nirâri king of hosts, son of Pudi-ilu king of Assyria, son of Bêl-Nirâri king of Assyria.") [Adad-Nirâri I reigned *circa* 1325 B. C.]

In the former notice Kelch Shergat should have read Kalch Shergat, Nardin should have read Mardin. The antelope which the corners of which ornaments (tassels?) are hanging. In another matter, Mr. George S. Stone, whose knowledge of the arms of the Near East is frequently called upon by the Curator, has commented upon the close similarity of the handle of this Assyrian weapon to that of the modern Afghan sword, a similarity which, for a number of reasons, may not be due to convergence.

The following poem and introductory note, printed in Punch, May 1, 1875, refer

to the Assyrian sword presented to the Museum by Mr. J. Pierpont Morgan and described in the BULLETIN, vol. VII, p. 3.

"Another Antique which attracted considerable attention was an Assyrian Scimetar in bronze. . . . The inscription assigns this fine weapon to the reign of VUL-NIRARI (? Vulnerare) I., thus giving it the incredible age of thirty-three centuries. It is probably the oldest dated sword in the world."—Times Report of Mr. George Smith's lecture at the Royal Institution.

Another relic from the great Bronze Age! Lethal this time in lieu of culinary: Fierce warfare doubtless did its wielder wage 'Neath VUL-NIRARI.

If Man's first worldly lesson was to feed, To fight must certainly have been his second. Some rude device to make a brother bleed

ls rightly reckoned Among his first inventions. Every land

Hives in its dust-heaps proof more plain than print

How soon man armed his homicidal hand With shard or flint,

But here's a choice antique which clearly shows That when this dainty death-dealer was dated, The art of neatly slaughtering one's foes Was cultivated.

Since this most ancient bit of bronze was new Three thousand years have passed—so SMITH explaineth—

The men it served are dead as those it slew, The sword remaineth. Still CAIN and TUBAL CAIN—Arcades ambo.'—

Stir up and arm for strife man's murderous passion,

As they did ere the mighty QUEEN SALAMBO Led Carthaginian fashion.

While bards will sing of war and war-drum's rattle.

TYRTAEUS, TENNYSON, old HOMER, BYRON.

"Sweetness and light" make but a sorry battle With "Blood and Iron."

Great VUL-NIRARI and his Vulcan clever Each on Time's Tablet hath engraven his mark; Say will such posthumous glory wait for ever On KRUPP and BISMARCK?

When thrice ten centuries again have flown
[If CLIFFORD'S climax spare the world so long],

Will War and "Woolwich Infants" then be known

As themes for song?

Or if some ninetieth century SMITH should light on

A buried blade, of British make and metal, Amidst the dust of—Dorking, say, or Brighton, And strive to settle

Its date and purpose, will the world around Be then Arcadian, or still a garrison? And will contemporary blades abound

To court comparison?

Alas! this sword that has survived so much
Has not outlived its function; much sad history

Has not outlived its function; much sad histo May yet be written ere another such Shall seem a mystery

To man unmilitant. The sword-smith's trade Still lives, nay, gathers ghastlier glories round it, Though ages part the smith, who forged this blade.

From SMITH, who found it.

XXVI

ARMOR WORN IN AMERICA

RMOR worn, worn for service, in America!—I don't believe it"— this from a distinguished visitor who stood in front of one of the cases in The Metropolitan Museum of Art. "Why, my dear fellow, we never had these

of adventurers, routed hostile armies. That horse-armor was then used, and largely used, is incontrovertible, and the condition of panic caused among the Indians by the invulnerableness of the Spaniard cannot be given too much



JEFFERY, FIRST LORD AMHERST, FROM THE PAINTING BY SIR JOSHUA REYNOLDS

mediaeval people in our country." But the fact is, none the less, that we did wear armor not infrequently in the early days, and that, in some instances at least, the armor was richly wrought and decorated—of a type pointed out in one of the Museum cases.

It was, of course, only in the earliest colonial times that armor was worn regularly. In the Spanish colonies it was in constant service during the sixteenth and seventeenth centuries. Indeed, it was due to their complete panoply that Pizarro and Cortez, with their handful

weight in the study of the conquest. With armored horses the invaders rode down masses of natives, and the invention of the stirrup of the conquistadores, of which a beautiful example is shown in the Museum, is said to have had its grim use in such a struggle. It was a stirrup of great weight with wide flanges at the sides and base, and the horseman could swing it fatally as he galloped through crowded squares. This type of stirrup survived in a decadent form until the early nineteenth century: its projecting flanges were retained only as space for

decoration, and it is more than probable that those who later rode with such a stirrup knew little of its reputed use.



STIRRUP OF CONQUISTADOR

Among the French in Canada armor appears to have been in frequent use. Champlain sketched himself in half-armor—a drawing which has given accurate data in costume and arms to the present commission intrusted with erecting a monument to Champlain at Plattsburg.

In the English colonies elaborate equipments were early worn. Portraits show that John Smith and Raleigh unquestionably appeared in enriched armor. Many corselets and head-pieces crossed the sea about the time of the Indian wars. The redoubtable Captain Underhill wore halfarmor and he records that on one occasion his head-piece saved him from an arrow which struck him near the forehead. Early town records show presents of corselets and casques—thus, Plymouth received a gift of a score of corselets in 1635. Sometimes an almost complete harness is recorded. The late Mr. Robert Sterling Blair, who had studied military affairs in the colonies, called the writer's attention to the details of a funeral of a governor of Massachusetts at which not

only were the head-piece and corselet borne in the procession, but the arm pieces, gauntlets, hip guards, even the round shield. At the close of the Commonwealth many of the Cromwellians who left the home-country probably brought with them their arms. Of this period, or slightly later, is the portrait of Governor Fitz-John Winthrop in half-armor, and his suit is said to be preserved "somewhere in New England." The regicides who came to Connecticut could hardly have come unarmed, and it is more than likely that they found the local militia in precisely the same gear as in England. Of this time was probably the "skeleton in armor" which Longfellow pictures, with fantastic license, as a viking.

Armorers, even, were not lacking. Corselets and head-pieces were wrought in Connecticut (Hartford), but they were probably of little interest from the point of view of the armorer's art. Buff-coats were worn, and one of these, which appears to have belonged to Gov. Dudley, is preserved in the Hancock-Clarke house in Lexington. It is a beautiful example of its period.

The fact is that during the late seven-



GORGET OF CAPTAIN FANNING AMERICAN REVOLUTION

teenth century armor was still in quite general use in all American colonies and, here as abroad, was worn by the highest officers as a part, and a very decorative part, of their ceremonial dress. Among those who are pictured in armor are Penn, Stuyvesant, Andros, Keith, Fairfax, and Nathaniel Johnson.

During the eighteenth century armor still appears in colonial portraits, but it is rare—as in the portraits of Oglethorpe, Stringer Lawrence, or Lord Amherst. The last-named wears half-armor with long tassets as late as 1760, and has a head-piece with a movable nasal; he is thus

bossed with lion heads in ancient Polish style. Rochambeau, too, probably brought with him his siege armor; we learn, for example, that he is described by Joel Barlow as "in gleaming steel arrayed." Paul Jones, according to his Scotch friend, Hyslop, wore a corselet under his coat in his fight with the Serapis, a relic which Jones afterward gave to the Hyslop family. It is now exhibited in the Riggs armor gallery. The last rudiment of armor was



PORTRAIT OF GOVERNOR PETER STUYVESANT ARMOR OF 1650-1660

pictured in the region of Ticonderoga by Sir Joshua Reynolds.

Thus, armor remained in vogue longer than is generally known. Even during the American Revolution it appears sporadically. Kosciuszko, when he came to this country, may have brought his armor with him, for he appears fully armed in a portrait dating from the end of the century; even his arm defenses are here complete and his shoulder guards are elaborately em-

the gorget plate which was worn throughout the Revolution as a regimental ornament. It is clearly the survivor of the wide guard, or colletin, which covered the neck and upper chest, and was overlapped by the rim of the corselet. The revolutionary gorget, which was small, usually decorated, and bore the number of the regiment, hung from the neck by a cord or ribbon, as it appears, for example, in an early portrait of Washington.

XXVII

THE GAUNTLETS OF THE EARL OF SUSSEX (1583)

R. CLARENCE H. MACKAY recently presented to the Museum a pair of gauntlets, beautifully designed, which have



SUSSEX HARNESS
FROM A DRAWING IN THE SOUTH
KENSINGTON MUSEUM

been identified as having belonged to an historical personage. The gauntlets, it appears, were made in the English royal atelier (Greenwich), probably about 1570, for Thomas Ratcliffe, Earl of Sussex, prominent in the court of Elizabeth. He was at various times Lieutenant General of the North, Lord Deputy of Ireland, and Ambassador to Spain and to the Emperor.

The gauntlets are in excellent preserva-

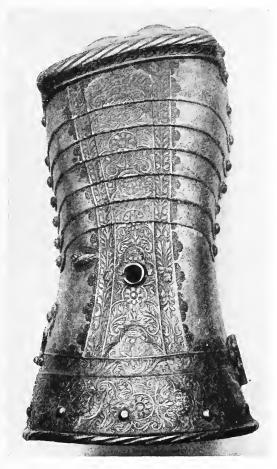
tion, parcel-gilt, richly etched in bands, longitudinal and transverse, and show an intricate pattern in ornament which makes it possible to compare them in detail with the gauntlets shown in a drawing in the ancient armorers' sketch-book now in South Kensington Museum. The drawing of the Sussex Harness is here reproduced from the lithograph given in Lord Dillon's admirable work, An Almain Armourers' Album (1905). Lord Dillon states in his text, "The gauntlets of this suit were sold in 1895 at the Spitzer Sale . . .," although at the time their identity was not known. On their artistic merit they brought a high price (for that time) at the sale, having been "pushed" by Mr. W. H. R., the well-known collector. They were adjudged, however, to a dealer in Paris from whom they were purchased by Mr. Mackay.

Closer study of the gauntlet and the early drawing brings out some discrepant details which at first make one hesitate to accept the identification given by Lord Dillon. Thus, the number of the lames of metal covering the back of the hand are but three in the drawing and six in the actual object; also, there are slight differences in the details of the knuckle plate and in the proportions and treatment of the etched bands. On the other hand, the elaborate pattern of ornament is unique and the workmanship is clearly of the "English type." Concluding, therefore, that the gauntlets came from the Greenwich workshop, it is hardly probable that they belonged to another harness of the same intricate design and workmanship which not accounted for in the governmental album, and the slight discrepancies are therefore best explained on the supposition that the drawing was made before the Sussex harness was prepared, and that the armorer "improved," in certain details, upon the "fashion plate" which

NOTES ON ARMS AND ARMOR

he prepared or which was presented him as a working guide. This conclusion is greatly strengthened when we compare in a similar way pieces of armor of known provenance with the Greenwich sketches given in the ancient album. Thus, the suit of Sir John Smith at Windsor has a We conclude, accordingly, in the case of our gauntlets, that Lord Dillon's identification is well founded.

Authentic armor of any kind is now rare, armor of artistic excellence is rarer, and armor of artistic excellence and of historical provenance is rarest and most



GAUNTLET OF THE EARL OF SUSSEX

greater number of lames in the upper leg defenses than the drawing shows, also differences in the face-guard and throat-plates. In Sir Christopher Hatton's suit in the King's Collection, the differences are quite conspicuous, and they are present also, but to a less degree, in the Scudamore harness, which had been retained until lately in the family of Sir James, and was even preserved in the house where he lived.

interesting of all. So we may well be grateful for the gift of the present gaunt-lets. During the coming months they will be exhibited with the harness of Sir James Scudamore, acquired by the Museum in 1911. In fact, it was due to Mr. Mackay's appreciation of the fact that the work-manship of these harnesses and of the present objects was identical that he at once added them to our collection.

XXVIII

A LOAN COLLECTION OF JAPANESE SWORD-GUARDS

HE Museum has recently borrowed from Mr. Howard Mansfield a collection of eighty-six sword-guards which represent admirably a highly developed branch of Japanese art. The guards, which date from the fourteenth century to the end of

and seventeenth centuries. The works of this family, or school, rank among Japanese critics as models of pure and dignified taste. One of the most noteworthy examples here shown is Mr. Mansfield's guard of Kaneïyé II which, on the face, represents a fisherman punting his skiff





SWORD-GUARD BY KANEÏYE NI-DAI, ABOUT 1600 FROM THE HOWARD MANSFIELD COLLECTION

the Shogunate, are now arranged in a special case and are exhibited near the west entrance of the Hall of Japanese Armor. On one side of the case appear guards of the decorated type, including specimens in various metals—iron, shakudo, shibuichi, copper, brass, silver, and tinted bronzes—enriched in many instances by incrustations in silver and gold. On the other side of the case are exhibited sword-guards of iron, beloved by Japanese of the older school, representing the greatest efforts of the earlier artists. Preëminent among these are guards of the family of Kaneïyé, which flourished in the sixteenth

against a strong current, and, above the fisherman, one notes lofty mountain tops; on the reverse is a temple on the ledge of a high mountain; below, the mist gathers, and over all shines the full moon. The only specimens in this case not belonging to the Mansfield Collection are two guards of Kaneïyé I and one guard of Kaneïyé III, which were presented to the Museum several years ago by a distinguished Japanese amateur of Kyoto, Masaüji Goda.

The present collection well merits the attention of lovers of Oriental art, since it represents the expression of artists in a

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field which for more than a thousand years has been given special consideration by the nobles of Japan. The sword was, as Ieyasu said, "the living soul" of the samurai, and its embellishment was found deserving of the serious efforts of the greatest artists. The makers of tsuba were not merely metalsmiths, but designers as well. In instances, moreover, tsuba were the

work of artists in various fields, just as, in the case of European arms, the greatest painters and engravers furnished the design for the technical work. In this regard one notes a tsuba of Natsuo (1828–1898). This, as the inscription tells us, was the product of this last of the great masters in the art working in coöperation with his friend, Soju, the painter.

XXIX

A COLLECTION OF ARMORERS' IMPLEMENTS

VERY collection of ancient armor requires technical care for its upkeep. The objects must be kept free from rust and occasionally remounted; from time to time restorations have to be made. In the carrying out of this work the Museum has

arranged a small shop in which technical operations may be carried on; and it has already proved its value when the armor which was secured from the Earl of Chesterfield was put in order. In this connection we note the purchase of a collection of armorers' implements which belonged to Daniel Tachaux, one of the few surviving artistarmorers. Mr. Tachaux brought his outillage to this country when he came from Paris in 1909 to make some repairs in

the Museum collection of armor. His outfit consists of over six hundred numbers, and includes nearly a hundred kinds of anvils and a great variety of hammers. Part of the collection was formerly the property of Ludwig Klein (1825-1882), an Alsatian armorer, who settled in Paris in the early fifties and was employed by the Emperor's order, repairing and mounting harnesses for the Castle of Pierrefonds, and later for the Musée d'Artillerie. It was there that his pupil, Le Bon, later became armorer. Klein's atelier was at first in the Rue St. Martin; there, and later in a shop on the Boulevard Jourdan, he carried on his

work, repairing, restoring, and copying armor for collectors. He made restorations for M. Carrand (père), the foremost amateur in armor of that time, who was, by the way, the preceptor of the American archaeologist, Mr. William H. Riggs. Klein worked also for M. Just, the Baron de

Cosson, the Duc de Dino, the Marquis de Belleval, and M. Spitzer. The present series of armorers' implements is known to have come in numerous cases from Klein's master, whose apprenticeship dated from the end of the eighteenth century, when some of the implements appear to have been old. Even if there were no other record, the present objects would demonstrate a high specialization of the technical side of the armorer's art. Curious anvils ("stakes") are pre-



WORKSHOP OF LUDWIG KLEIN BOULEVARD JOURDAN, PARIS, 1875

sent which were used only in the making of the combs of helmets, or in the complicated operation of forming borders, and in embossing objects of large size. The implements give, in a word, no little light upon a field which has been curiously neglected—the ancient manner of making armor—and with the collection we have now the names for various implements which are almost as extinct as the armorer's art. It is hoped that a catalogue raisonné of the collection will be prepared in which the objects will be illustrated and their uses explained.

XXX

THE ARMOR OF SIR JAMES SCUDAMORE

HE Museum added to its collection in 1911 two incomplete suits of Elizabethan armor, decorated in bands engraved and partly gilded, which came from an English manor-house, Holme Lacy, in Hereford-

shire. This was the ancient seat of the family of Scudamore - Stanhope, now represented by the Earl of Chesterfield, and here the armor had remained since the time when it was borne by Sir James Scudamore. Sir James, it may be mentioned, was well known in his day as gentleman usher at the Court of Elizabeth, and a personage of sufficient prominence to warrant Spenser's referring to him in the Faerie Queene. He was a man of means and we may safely assume that his panoply for tournaments and court ceremonies was prepared by the best artist-armorers. He is pictured in one of the suits in a full-

length portrait in the possession of the present Lord Chesterfield (fig. 4), and he appears in the second suit under the name of Mr. Skidmuer, in a contemporary colored drawing (fig. 1), in the celebrated armorers' pattern-book—believed on weighty grounds to have belonged to the royal

armory of Greenwich—now preserved in South Kensington Museum.

It is rare in these days to discover armor which belonged to definite personages, hence it may not be out of place to review as best we may the history of the present

pieces. Probable it is that they never strayed far from the home of their owner. They may originally have been mounted on racks or manikins after the prevailing fashion and dismembered when Holme Lacv was remodeled, toward the end of the seventeenth century, at which time probably some of the most decorative pieces were hung about the house. In fact, we know that they were displayed separately, for when the armor was examined old wires were found in place by means of which pieces had been attached to pegs or brackets. Later on, the pieces were taken down, some were lost, the rest stored and for-



FIG. I. CHESTERFIELD ARMOR
FROM A DRAWING
IN THE SOUTH KENSINGTON MUSEUM

gotten. It was only in 1909, that all parts that remained of the armor reappeared when the contents of the ancient manor-house were overhauled for public sale. They were discovered by a London antiquary, who had been asked by Lord Chesterfield to visit Holme Lacy and ex-

pertise the art objects, and it is he, Mr. Henry Lenygon, who, happening to visit the Metropolitan Museum, has kindly given the following details, as to where and how the armor was found:

"It appears that when Holme Lacy was rebuilt in the reign of Charles II. a part of the older building remained untouched, the 'Henry VIII tower.' and in the attic many objects had been stored away for generations: here were found large decorative paintings, wood carvings from mantels and cornices, and stacks of Tudor doors.



FIG. 2. HELMET OF SIR JAMES SCUDAMORE

Under a litter of odds and ends lay a long chest and in this the armor was lying in a confused mass. Nearby was a low window through which the rain had entered at various times, for the floor had rotted and the bottom of the chest had evidently been damp." This was clearly not the best storage place for armor, and one little wonders that some of the pieces had been greatly injured, especially at the points where they came in contact with the damp wood. In fact, at all points the armor was sadly rusted, and evidently the first view of the chestful of fragments was not exciting, for the visitor placed upon it an

upset price of only twenty pounds. And in the catalogue of the sale the lot was described in but a few words. Apparently none of the auctioneers or their advisers realized the importance of their find. On the other hand, collectors and special antiquity merchants were not long in finding out that the armor was of the best quality, of historical interest, and of great pecuniary value. One of these merchants, accordingly, seeking a profitable bargain, took prompt measures to obtain the armor before it could be sold publicly; he visited the owner, made certain statements, and upon payment of a considerable sum was given an order to withdraw the lot from the sale. This procedure, as one might have prophesied, caused comment; several who came to the auction declared publicly that they would have given a much higher price than the owner had obtained. Furthermore, it was said that the London purchaser was holding the armor at a very high price. These things, in due course, came to the attention of the former owner, who was led to declare that he had been persuaded to sell under unfair representation and that he would take means to recover his property. Then followed a lawsuit which ended in a verdict that the armor should be returned to Lord Chesterfield. It was soon after this that the Mu-•seum secured the objects privately at the instance of its President, J. Pierpont Morgan.

The armor purchased represented, as above noted, parts of two harnesses. Of one suit the head-piece was lacking, of the other the corselet; in both several plates were missing, as well as the gauntlets. And one who did not know armor might well have been disappointed at the condition of the pieces when they came to the Museum; they were rusty, detached, broken, and special technical skill was required to put them in proper order. Fortunately the Museum armorer, Daniel Tachaux, was at hand to undertake the work and the results have been excellent. At first it was thought that the suit had originally been given a russet color over its bright areas, after the fashion of a number of later harnesses, but a more





FIG. 3. ARMOR OF SIR JAMES SCUDAMORE AS EXHIBITED IN 1913

careful examination of the pieces showed that the armor was primitively white, almost silver-like in its brilliant polish. This became clear when the helmet was taken apart and when various plates of arms and legs were unriveted, for here appeared the primitive surface, mirrorlike, retained for over three centuries fresh from the hand of the armorer. This may be seen, for example, at points on the elbow guard pictured, enlarged, in fig. 5.

The restoration of the Chesterfield armor was of necessity a laborious task. The etched surfaces were carefully cleaned and the rust removed by brushing and by the aid of a delicate burnisher, this following treatment with oils and ammonia. Each tracery in the pattern, it was found, had to be cleaned separately. Then the rusted surfaces were polished and the missing plates added, etched and gilded. In all cases, however, where a missing fragment was replaced care was taken to engrave upon the surface of the plate the date of the restoration and the signature of the maker. And these restorations will also be noted in the descriptive label. For temporary exhibition parts of the two suits have been associated, fig. 3.

As to where and when the present harnesses were made. They are of closely similar workmanship, and there can be little doubt that they were produced in the same place. And we have evidence that one of them was made in the royal atelier at Greenwich, for it is figured in the ancient pattern-book (see Lord Dillon's Almain Armourers' Album. 1905, W. Griggs, London). The artist who prepared it is currently given as Jacob Topf (1530-1597), a well-known armorer who worked especially at Innsbruck for the Austrian Court. The armor, on this assumption, would be German or Austrian, made in England by a visiting armorer. This, in a word, is the present verdict of the most competent English authorities. They do not believe, furthermore, that their country was producing skilful armorers in Elizabethan times, but depended upon Almain and other imported artists for their best harnesses. It must be admitted, on the other hand, that the evidence

is painfully meager which connects the Innsbruck armorer with the Greenwich workshop, and we may even be skeptical whether the inscription in the album on the Lee and Worcester suits, "Thes peces wer made by me Jacobe," refers to Jacob Topf; it may rather be the remark of an English armorer whose family name Jacob, Jacobe, or Jacoby, was not at all an uncommon one. The latter view is the more probable when we consider that Topf was working from the year 1575 and thereafter, not in Greenwich but in Innsbruck, and we are sure that some, if not many of the "Topf" harnesses, were made after 1575: thus, Hatton's suit is dated 1585. and Leicester's is of similar date. Moreover, it may be borne in mind that the known work of Topf in the Vienna Museum does not agree satisfactorily with the work of these English harnesses. The present writer has come to the conclusion. therefore, that further examination of the English records will show that a school of English armorers had arisen in the roval armor-ateliers, as a result of grafting several generations of armorers of various nationalities, mainly German, upon an English stock, and that already features had appeared in this English armor to distinguish it from Continental armor. Lord Dillon objects that these harnesses could not be English since certain parts of them, e. g., the bravette, were not worn in England at that time. But it might be equally well maintained that these pieces were rarely, if ever, worn in other countries at this date, and they were merely "rudimentary organs," as the evolutionist would say, persisting in the full panoply of a grand seigneur. And it is clear to us that the present Scudamore harnesses are English harnesses, and that they have distinct family likeness to the other suits known to have been produced in Greenwich. Thus, we have only to compare the shape and set of the heavy head-piece, with its peculiar apertures and clasps; the massive shoulders with embossed eminences which cover the metal shoulder-clasps of the corselet; the elbow and knee guards with their shell which attaches in a separate piece; peculiarities in hinges and fastenings—and in



FIG. 4. PORTRAIT OF SIR JAMES SCUDAMORE REPRODUCED BY PERMISSION OF THE RIGHT HON. THE EARL OF CHESTERFIELD

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general a certain "heaviness" in form, large-jointed, and loose-fitting, all in the substantial, honest. "comfortable" work which marks the English artist-artisan.

It may be worthy of note, finally, that the present harnesses, defective as they are, form an appreciable fraction of known Elizabethan harnesses of their class. The Greenwich album figures twenty-nine suits, and only ten (including the present examples) appear to have survived, and of these all are more or less incomplete. The only harnesses more complete than the Scudamore ones are those of the Earl of Worcester (the Tower of London), Sir John Smith (the Tower), Sir Christopher Hatton (Windsor), the Earl of Pembroke (Wilton House), Sir Harry Lee (Armourers' Company in London), and Lord Buckhurst Wallace Collection).



FIG. 5. PART OF ELBOW GUARD SHOWING AT POINTS THE ORIGINAL SURFACE

XXXI

A SWORD-GUARD

BY THE JAPANESE ARTIST KANEÏYÉ SHO-DAI

→ HE tsuba or sabre guard appeals in a peculiar way to the lover of Japanese art, perhaps in part because it touches Japanese manners and mind, history and religion more intimately and more attractively than any other type of object with which one is apt to come in contact. The foreign collector soon learns, in fact, when he visits Japanese friends that the trayful of swordguards which is placed on the mat before him even gives an insight into the position and refinement of the family which possessed them. This may seem to him in the beginning somewhat of a paradox since he is told that sword-guards were ever regarded as transitory things—ornaments which were often changed, the mere décor of the sword-blade which alone was to be kept forever as the symbol of family But he presently discovers that the little groups of sword-guards which are shown him in private hands include the specimens which were ordered by members of a friend's family directly from the tsuba artists, and, artistically considered, had withstood the fire of criticism of various members of the family during several, sometimes many generations.

It may be safely said that sword-guards examined in private collections in foreign countries are by no means the sword-guards which one sees in Japan, under similar conditions. The Japanese collectors who envelop their tsuba in soft old brocade, and tuck them away in exquisite lacquered cases, have usually but few examples, perhaps not more than a dozen in all, but each is of delightful quality and represents fairly the pick of picked specimens. The Japanese connoisseur is not the man to allow an important guard to find its way into trade. In fact, when a

really good sword-guard is for sale, it is apt to be taken immediately by a local personage; for he it is who will pay the price for it, and not the foreign buyers, and it is he, therefore, who is always given the first choice by merchants from one end of the country to the other. In a real Japanese collection common sword-guards have no place: they are cast aside everywhere, and can sometimes be bought almost by the pound: in a single dognia the writer recalls seeing several hundred guards, including a number quite ornate, which could be purchased for about a penny apiece.

It is difficult to appreciate the love for a beautiful sword-guard which was felt by a samurai of the old school. Its form delighted him and its color; its patine soothed him, and he touched its soft surface constantly and gently. Perhaps its design suggested some deed of Japanese chivalry which made this guard a fitting setting for an historic blade. Naturally, therefore, samurai, who represented a large and influential class, patronized the makers of tsuba, and from this general patronage arose and flourished schools of artists, some of whose names persisted for centuries, some but for two or three generations, each distinctive, however, and producing obiects which form in themselves an attractive theme for study—a theme no less attractive, perhaps, because involved and difficult. Indeed, it would be quite unwise for anyone to attempt to understand the sword-guards of Japan from the viewpoint of many schools and many makers, as one is often tempted to do when living outside of Japan; 'tis puzzling enough in tsuba to study a single problem intensively.

Nothing, in fact, has given the present writer a better insight into the difficulties

which beset a student of Japanese art (for from one case of this kind we may learn all) than his experience while in Japan, collecting and studying the work of a single family of sword-guard artists, trying by the method of comparison to distinguish among all available specimens the good tsuba from the bad. To this particular study he had been led by seeing in New York, in the Mansfield Collection,

an iron guard which seemed to embody many distinctive tures of Japanese This tsuba art. was of iron, simple, with a beautiful brown patine: it was executed in low sculptured relief, and pictured admirably a night scene. Below the mountains, as though in faint mist, a boatman was pushing his skiff. His face was of silver, and it shone in the light of the moon. Now the art of the guard lav in this, that the

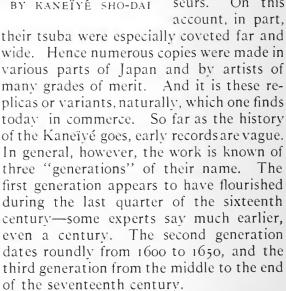
man seemed living, executed boldly though crudely, apparently by but a few strokes: it was clear that he bore his weight heavily on his pole, that the figure was tense, rigid, yet moving, and that the boat itself rose buoyantly from the water. Even at first view, this guard made a deep impression, as it was clearly the work of a master, and his name, according to the signature, was a certain Kaneïyé who lived in Fushimi in Yamashiro.

Now in general, in foreign countries, a Kaneïyé guard is a Kaneïyé guard, for better or for worse, and the collector is apt to place it in his series and catalogue it as the work of the artist whose name it bears. In Japan, on the other hand, a Kaneïyé

guard is a Kaneïyé guard only when, like Mr. Mansfield's guard, it possesses the definite characteristics and traditions of one of the members of this great family. In fact, it need not be signed, for in many if not in all cases the signatures are of considerably later date than the guard. Thus, given a large collection of guards bearing the classical signature (e. g., the writer's collection, which includes about three hundred num-

bers), a Japanese expert would select at the most but one or two guards as authentic work of the Kaneïyé. All the others would be considered more or less ancient copies or counterfeits.

The reason of this is not far to seek. It appears that the Kaneïyé artists were men of great renown in their day, and their work passed into the hands only of distinguished personages and connoisseurs. On this account, in part,



The great number of the "Kaneïyé



SWORD-GUARD (OBVERSE) BY KANEÏYÉ SHO-DAI

tsuba" are clearly of eighteenth-century workmanship. In a general way, the first generation (Sho-dai) executed iron guards occasionally with four marginal indentations (mokko form) and decorated with personages. Of the latter, the faces, arms, and ornaments are apt to be executed in precious metals, while other parts of the figures are sculptured out of the substance of the guard, and in sharp relief, i. e., they

donot "round" into the background, and the sculpturing is simple, with a suspicion of Chinese workmanship, and singularly effective. The themes are classical, often religious or historical, usually treated naïvely and nearly always so as to suggest darkness and mystery. The second generation of Kaneïyé (Ni-dai) produced guards of some-

what flatter



SWORD-GUARD (REVERSE) BY KANEÏYÉ SHO-DAI

relief, of better metal, always thin in the region where the guard is pierced by the sword-blade and typically finished along the border with an irregular line, sharply margined, which simulates a folding over of the metal. The themes, drawn from folk-lore. poetry, and philosophy, are delicately modeled, usually in low, flattish relief, and are always developed with masterly simplicity. By Japanese experts the work of the second generation is considered the best. Kaneïyé Third (San-dai) prepared guards which were disk-shaped and somewhat heavy, of iron of the best quality, taking usually a satin-like patine: his favorite themes were birds and plants, especially bamboo, treated in low relief simply, but

with great artistic judgment. A single bird, and a small one at that, and a single spray of leaves, were all that this master was apt to use in a composition.

We may note that experts differ as to the details which distinguish the work of the generations of these artists. It is generally admitted, though, that the signatures which the tsuba bear have little or no significance: they are generally of later

date than the guard, and are more or less detailed, depending upon the connoisseurship of some early owner.

We need hardly add that authentic works of any of the generations of Kaneïyé are rarely to be Foreign museums usually exhibit copies for originals and give a very indifferent impression of the skill of these artists. Few of their tsuba, in fact,

seem to have found their way out of Japan. By good fortune, in 1906, The Metropolitan Museum of Art came into the possession of three Kaneïvé guards, of which two were the work of the first generation and one of the third—these, the gift of a veteran Japanese collector, Mr. Masaüji Goda of Kyoto (see Bulletin, vol. I, no. 5). And only recently the Museum has secured its fourth example. This had belonged to the late Dr. Édouard Mène of Paris, the widely known collector, and was purchased at public sale: it had several times been figured in works on Japanese art, and was the most highly esteemed among the thousands of sword-guards in the Mène Collection. It had been as-

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cribed to Kaneïvé the Second, but the writer believes that, according to the criteria of Japanese experts, it should be assigned to Kaneïvé Sho-dai. In this attribution, one would lay stress on the character of its execution—its roughly treated margins, its bold relief, and its greater weight. It retains, also, the delicate black scales at various points of the guard, suggesting that it was at one time covered with lacquer. These scales, so far as the writer knows, occur only in the authentic works of the first generation. In its theme, too, it is typical of the earliest generation. It pictures on its face a descent of the heavenly hosts, and on the reverse, in fearful contrast, a fiend, with horns, tusks, pitchfork, and cauldron, winnowing human bones. It can safely be said that the present composition is one of the most important attributed to the early Kaneïyé. In no other guard, for example, are so many figures portrayed. Even in the matter of size it is exceptional. for it measures 3 in inches in height. On the face of the guard there are no less than thirteen personages, and so strongly grouped that the artist has felt it proper to leave bare the entire opposite (left) side of the guard. On a descending cloud appears foremost Amida Butsu. lotus-borne, at his side Sessei bowing in prayer, and Kwannon, who stooping has taken in her hands the fruit of the lotus, and is presenting it to the world. These three figures are modeled in the master's best style, simple,

in bold relief, archaic in modeling with details skilfully suggested, as in the headdress of snails of the central figure. As far as the writer is aware, it is the only guard of Kaneive in which perspective has been fairly attempted; thus in the cortège of Bodhisattvas, the more distant figures fade away in size, and details vanish, as in faces and hands, giving to the procession an appearance of great length. As an aid in producing this illusion, we may note that the halos, which are in bold relief in the foreground, fade away into mere shadows in the figures in the rear. too, in the treatment of the cloud: it rolls up its vapors boldly in the foreground, then spreads out, and in the background fades away in a trail. High lights, as usual in Kaneïvé guards, are carried out in precious metals. The sacred lamps and the mirror are picked out in gold; faces and hands are of silver, and these, catching the light, make the background appear still darker, and thus add to the mystery of the theme. The provenance of the present guard cannot be followed. It appears to have been purchased by Dr. Mène early in his career as a collector of Japanese sword-guards, perhaps in the early seventies, when many excellent objects found their way out of Japan. Dr. Mène, it may be remarked, was a great admirer of the work of this school of tsuba artists. He had, indeed, in his collection possibly fifty guards signed Kanqıyé, but all of these will be generally accepted as the work of copvists.

XXXII

A THIRTEENTH-CENTURY MARBLE RELIEF FROM POBLET

►HE monastery of Poblet was the home of many examples of early Spanish art which are now exhibited in foreign museums; for the rioters who plundered and partly demolished the ancient buildings in 1822-1835 carried away numberless statues and decorative fragments from altars and tombs. Some of these objects early found their way into the hands of traveling artists, who used them as studio "effects" in days when every studio was more or less a bric-à-brac shop; others have remained hidden away in the neighborhood, and have been extracted year by year by visiting collectors, sometimes from the most unlikely places -garrets, cellars, garden rockeries, fountains, and stables. Even a few years ago an interesting marble relief was discovered, as I myself can bear witness, in a poultry stall in the street market of the neighboring Tarragona. Important finds, however, have become rare; noteworthy, therefore, is the Museum's acquisition of a small bas-relief (18 in. x $22\frac{1}{2}$ in.) of a chevalier, lately unearthed, which formed part of one of the earliest monuments of the ancient church. It is probably from the side or end of a tomb, and from its excellent workmanship the object was evidently prepared in memory of a personage of the highest rank. This we may fairly conclude was the celebrated conquistador, Jaime 1; for a part of a border of a monument bearing the kingly blazon of Aragon was discovered at the same time, a fragment which formed a cornice for the present relief. Certainly the object dates from the period of Don Jaime, who died in 1276. Other parts of his tomb have been preserved and correspond in material and workmanship to the present sculpture. The mummy of the king, it may be noted, is no longer at Poblet; it was transferred about 1836 to the choir of the Cathedral

of Tarragona where a new monument has been erected.

Aside from the interest of provenance, the present relief is worthy of careful study from two viewpoints: first as an cbiêt d'art and second as a rare document for the study of early military equipment. In the first regard, one recalls that the plastic art had reached an extraordinary degree of development in Spain during the thirteenth century, and it is not difficult to decide that the present work shows the marks of its place of origin and of the period. The horse bears its knight proudly, its legs, fore and hind, separated widely, the posture of a trained horse en grande tenue. It seems huge in size, for the head is small, the neck high and straight, quite giraffine, and there is a mystical look about it which recalls to us the apocalyptic beasties dear to the artists of those days. Over the horse's head and shoulders passes a tightly fitted housing which falls in narrow rounding folds about the neck, and extends thence from the chest to the ground, its lower margins rolling outward in slightly radiate folds. The housing appears at the crupper also, and, after the mode of the thirteenth century, hangs nearly to the hoofs. The chevalier himself is executed in a masterly way. He sits lightly balanced, high in his armored saddle, with the air of one who has been reared on horseback; one feels that his knees grasp the saddle and that his feet swing freely in the stirrup. And that his seat is good is shown in the swing of his shoulders and in the inward curve of his backbone above the Even the set of his head indicates the horseman at his ease. As he turns to face the observer, he extends his arms in gesture of salute. The proportions of the figures are clearly naïve, the horse is a monster and the man is a dwarf in arm and leg, but these are defects which are soon

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forgotten. One notes rather the poise and energy of the knight and his destrier, a composition of rare vitality. Its sculptor had also mastery of his material. He was sure of his lines, whether chiseling in boldest relief, or modeling delicate draperies, showing in these matters the same traits as the Greek artists. The entire marble appears to have been brightly polychromed, judging from the present traces of color; the horse's housings were striped vertically in red (the color of Aragon), and their linings were green.

From the viewpoint of the study of ancient armor, the present sculpture is of considerable value. It supplements, in the round, the drawings of the manuscript Cantígas de Santa Maria, of Alphonso the Wise, which is preserved today in the Escoriál. It shows similar horse trappings, including a curious plate, probably of cuir-bouilli, which protected the flank and rump. The rein was singularly light, probably of horsehair, which was flung over the high cantle of the saddle; it was for curb only, and the branch of the bit, to which it was attached, extended far down at the side, the ring marking its end appearing against the horse's neck. 'Twas a merciless curb, and speaks clearly of a time when a rider expected instant obedience: he had other things to do than struggle with his horse; his hands must be largely free for the use of buckler and sword. In the knight's equipment one notes the early

basinet which extends low at the back of the head, comes to a sub-acute point, and is strengthened by strips of metal, probably of steel gilded, which covered the sutures of the triangular plates which make up the shell, or timbre, of the casque of this period. The knight is fully clad in banded mail, which is of links of the largest size, and his heavy shirt or hauberk extends down the thighs half-way to the knees. He is wearing a surcoat, close-fitting, but slashed at the skirts; it is especially interesting, as the modeling clearly shows, that a heavily padded garment was present underneath the mail. The legs were encased in a pantaloon of chain-mail which terminated in mail sollerets, as one sometimes sees in early brasses. The mail of the hand was not continued over the palm: here a separate pad is shown which was probably of leather. A narrow ceinture suspends the long straps of the sword hanger, which is articulated to the scabbard by means of large rings. The sword hilt has the usual short guard and straight quillons, and the pommel is unusual in developing the form of a fleur-de-lis. The buckler, borne on the knight's extended arm, is typically Spanish; its rim is distinct and was probably of metal and its central portion was of wood, or possibly of boiled leather; the straps for the hand and arm were broad and strong, and their ends slightly ornamented where they were fastened to the shield.



MARBLE RELIEF
SPANISH, THIRTEENTH CENTURY

XXXIII

A RAVEN IN EMBOSSED STEEL BY THE JAPANESE ARMORER MYOCHIN MUNESUKÉ



SIGNATURE OF MYOCHIN MUNESUKÉ

HE Museum acquired recently in Paris at the sale of Dr. Edouard Mène, the well-known collector of Japanese ironwork, the celebrated Raven which had long been known as the capital piece of his collection. This had come to Dr. Mène early in his career as a collector. had

been described and figured in various works on Japanese art, and had been exhibited at the Museums Guimet, Cernuschi, and elsewhere.

The raven is, of ccurse, an okimono, or ornament for the ceremonial niche (tokonoma) of a Japanese room. It is of large size, about eighteen inches in length, and seems to have been prepared for a great tokonoma, such as one sees in the palace of a daimyo. It is an extraordinary object from many points of view; it is made of a material which is least suited to plastic work, it is embossed with close fidelity to nature, and it is remarkable in its living quality. In the last regard, if in no other, it differs from the hundred and one okimono of its type which one finds in modern shops. The bird has been caught by the artist not only in a lifelike pose, but in a raven's pose, and in one which, while full of expression, is motionless, therefore suited to representation. To the Japanese

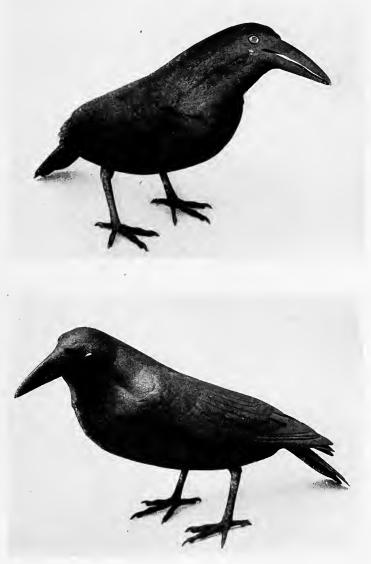
mind, moreover, and to the foreign one for that matter, this pose has about it something which grows in meaning-an idea both humorous and human which makes the real raven fit into its stiff iron 'Tis a thieving raven that is pictured, but one with a twinge of conscience, alert on his spread legs, his wings with just a degree of readiness about them; a raven that hesitates to make a sound, but has his beak slightly opened, as though he feels it his duty to say something. still remains undecided in spite of the intense thought which causes him to cock his head sidewise. After all, he may be expected to slink away uncaught and "save his face." . . . Every one who observes him, I believe, develops such impressions. In fact, when the collection Mène was exhibited at the Hotel Drouot it was interesting to stand near the case of the raven and study the effect he made upon his visitors. They would come up, one after another, and glance at him in the hurried way of auction-hunters; then their expression of haste faded away and they would examine him quietly, sometimes circling about till they came to rest at the right point of view. His, in fact, was the only case in the gallery before which visitors would usually come to a full stop. And their remarks showed clearly that they appreciated the artist's point of view. In fact, in an instance of this kind, the Parisian art-collector is singularly apt to seize the conception of the Japanese.

The present okimono bears the signature of Myochin Shikibu Kino Munesuké, the Chinese characters of whose name appear on a featherless tract under the tail. And this Myochin is evidently the Munesuké who flourished in Tokyo, or Yedo, in the

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early years of the eighteenth century (his precise dates, I find, were from 1646 to 1724), and who was widely known for his work in repoussé. He it was who prepared helmets (hachi) embossed in fantastic forms for members of the shogunate, together with plastrons and shoulder guards

of preparing armor for a court which was always at peace, and he was constant'y tempted by tasks which lay beyond his field. So he amused himself and startled his distinguished patrons by exhibiting objects which had never before been produced in iron. From huge eagles to



RAVEN BY MYOCHIN MUNESUKÉ

with splendid dragons in relief. Armor making, indeed, was his true claim to recognition as a member of a distinguished family, for he was the official representative of and twenty-second in descent from the first Myochin Munesuké, the great artist-armorer of the twelfth century.

The second Munesuké, it appears, was a versatile genius; he is said to have wearied

minute fireflies he forged ornaments of all sizes and forms. What his fellow-artists would model in wax, for bronze-founding, he modeled at once in armor-steel, and he is reproached with having forged princely armor with less skill than he made toys.

Doubtless much of the work which bears the name Munesuké is false, perhaps in as

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large a proportion as eight examples in ten. But the present object is apparently the exceptional one. It is admirably executed, and as an example of steel repoussé it is quite equal to the best work of the beginning of the eighteenth century. The incised lines representing feathers give their outline and texture in a masterly way. The metal itself is of the quality one would expect, and the patine and the signature are convincing. But the best evidence which associates it with the hand of Munesuké is the livingness and expression which has been pounded into this bird of steel.



RAVEN BY MYOCHIN MUNESUKÉ

XXXIV

TWO MEMORIAL EFFIGIES OF THE LATE XVI CENTURY



URING the Middle Ages western art differed notably from the art of the Far East in the nature of its causal impulse or inspira-This in the former case was the teaching of the Christian church; in the latter, it was a body of social precepts which considered the family as more or less a religious organization. The church fathers took into account this earlier cult and rather belittled it: they preached in certain instances the disrupting of family bonds, a humility which was higher than names or blazons, and in general a disregard for such vanities as memorials, whether for the quick or the dead. strictest fathers even went so far in an opposite direction as to commend unmarked graves and ossuaries in common.

But the ancient feeling of filial piety which expressed itself in costly memorials could not be modified readily: it had grown on European soil in Roman and pre-Roman times, and although it had not rooted itself so deeply as in the East, its influence was potent. It is a curious fact, indeed, that so large a proportion of the objects of western art preserved in our museums is of a memorial nature, things referring usually to the dead, occasionally to the living, paid for out of the family purse, and cared for by the family directly or indirectly. In fact, should we take from a modern museum, the Metropolitan Museum, for example, all objects which served as memorials, or were connected with the care of the dead, we should wellnigh destroy the galleries of Egyptology and the Department of Classical Art, and we should sadly injure other branches of exhibition; important statuary would disappear, as well as much metalwork, including some of our rarest armor, together with all objects which were associated with memorial chapels and offerings—not omitting pictures and tapestries. In this connection it is now known definitely that the Museum's suite of Gothic tapestries hung in a mortuary chapel.

In the matter of commemorating the dead this condition is best illustrated among earlier objects—those which antedate the middle of the sixteenth century: after this, modernism had become widespread, and ambitions developed along the lines rather of things for the living than of costly veneration for the dead. During the Middle Ages the history of these pious works can be followed with fair accuracy by tabulating the monuments with which early churches are filled; for it is reasonable to infer that the sentiment was strongest where families were most willing to pay roundly to commemorate the life of a kinsman. On such grounds we conclude that this form of family piety was developed strongly in the twelfth and thirteenth centuries; that it reached a high point in the fourteenth (bear witness the quality of the church brasses in England); and that it touched its zenith in the fifteenth century when memorials of every nature literally crowded the churches of Europe: they took the form of woodwork and statuary, stuffs, lamps, churchly apparatus, pictures, illuminations, glass-representing almost every branch of the art interests of the period.

But all of the mediaeval objects which memorial chapels have yielded us were only the accessories of the tomb. The nucleus of activity (speaking paradoxically) was clearly the gravestone or effigy of the dead, and this therefore may well be expected to serve as an index to the artistic development of its period. In fact, all museums will admit the great, the very

great value of mediaeval effigies in the history of western art, yet curiously enough they purchase and exhibit them rarely: they buy eagerly the fittings of chapels, but few there are that would be willing to purchase gravestones, lest, for one important reason, in this way they encourage their pillage. They would rather, in some instances, contribute to keeping ancient monuments in their original condition. The few good monuments which have found their way into trade have usually been taken from ruined churches and here the truest piety was evidently to remove the tombs and care for them in a museum gallery. Under these conditions it has happened that the South Kensington Museum, the Louvre, the Bavarian National Museum, and the Germanic Museum, especially, have come to acquire objects of the greatest technical and artistic interest. Up to the present time, however, the Metropolitan Museum has had few opportunities of making acquisitions of this kind. Through Mr. Morgan's interest it has indeed two kneeling portrait-figures from the memorial chapel of the de Biron, but it has no worthy brasses, no sculptured slabs, and until recently, no recumbent effigies. mention, therefore, as a step in the direction of filling this gap, the acquisition of two figures, which, although of late date (about 1590) when tomb portraits were becoming less interesting, have at least the merit of having been made by a wellknown artist.

A few details of these effigies may be given—they are of life size, sculptured in white marble, and were primitively colored (monochrome). They were found in Lyons where they appear to have belonged to a chapel now destroyed. In general, time has treated them kindly; man alone in their case has been vile, for he broke them into transverse pieces when he scaled them from the slabs on which they were mounted, and he has cared for them shabbily. fact, when they were brought to the attention of the Secretary of the Museum they were in a dingy little upholstery shop in the Latin Quarter, standing in a dark corner behind a pile of rusty chairs. The proprietor of the shop, however, knew their provenance, and had at hand a clipping from a Lyons paper (La Salut Publique, March 6, 1912) which showed when and where they had been found. It appeared that they had been made the subject of a report before the Academy at Lyons by M. Caillemer, who stated that they had been discovered about 1830 at Sainte Foy, on the site of the present Hospice du Boeuf. M. Caillemer recalled to the Academy the paper on these effigies which had been presented by M. Bégule at the session of April 13, 1907, and he hoped that the Academy would take measures to preserve these objects of art in the Museum at Lyons, for he declared that there was danger of their being "sold and shipped to America."

The effigies are in high relief: they picture man and wife, the former of mature age, in full armor, lacking casque only; the latter in a flowing robe, with stomacher and cap. The heads of both rest on double cushions, which are sculptured intricately with galloon and tassels. The statues are evidently portraits, and interesting portraits at that, though they can hardly claim the merit of great works of art. They were finished soberly, and with great attention to detail-thus, the hands are evidently intended to be as accurately modeled as the faces. armor and draperies are carved with the same painstaking care, although the result is perhaps needlessly stiff. One discovers only here and there a trace of the skill of the earlier portraitists, e. g., in the treatment of the robe at the knees and feet, and in the modeling of the man's right forearm and hand.

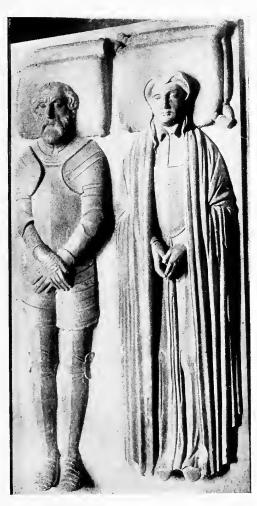
From the viewpoint of the costumes of the period, the figures are remarkable. They have unusual simplicity; the armor is plain, there are no jewels or ornaments, the woman's collar and head-gear are quite unadorned,—features all of which suggest that the man and wife were Huguenots—a suggestion borne out incidentally by the way in which the man wears his hair and beard. Then, too, the figures date clearly from the great Huguenot period, for the details of armor (which, for the rest, shows some rare technical features), head-dress,

NOTES ON ARMS AND ARMOR

and stomacher give quite an accurate date to the work.

One may hazard the note, furthermore, that the people were personages, for they were of sufficient importance to warrant their family seeking to have the portraits executed by a foreign artist well known in his day. This was the Roman sculptor, Pietro Paolo Olivieri (1551-1599), whose signature appears admirably chiseled on one of the cushions. Oliveri was then at the height of his career; he had carried out

important commissions for the Holy See; he had executed the colossal statue and tomb of Gregory XIII at the Capitol, and the relief on the monument of Gregory XI at Santa Francesca Romana; by this time, too, he had probably finished the Saint Anthony upon the tomb of Sixtus V at Santa Maria, as well as the important bas-reliefs at the Villa della Volte near Siena. His best-known work is, perhaps, the high altar of the basilica of Saint John in the Lateran.



MEMORIAL EFFIGIES
BY PIETRO PAOLO OLIVIERI

XXXV

LOAN COLLECTION OF JAPANESE SWORD-GUARDS

HE Museum is fortunate in being able to show a notable selection of Japanese sword-guards (tsuba) from the collection of Mr. Malcolm MacMartin, of this city. The guards are exhibited in a case in the present hall of Japanese armor.

Mr. MacMartin's special taste runs in the line of decorated guards, and consequently there are but few examples shown that date back of the eighteenth century. The division of centuries in the western method of computation was, of course, never a division in the minds of the Japanese and only roughly serves the purpose of classification. Nevertheless, the triumph of the Tokugawa clan in the civil wars that were raging at the beginning of the seventeenth century, resulting in the establishment of a régime that lasted down to 1868, affords a line of natural demarkation in the matter of sword-guards, as well as in Japanese political history. Up to that time the guards had, with but few exceptions, been made of iron for actual use in warfare and these derive their artistic value from the quality and treatment of the iron and from excellence of design in openwork or stamping or carving in the same metal, and from variety of contour. It is true that one or more of the masters of the Kaneivé family had earlier begun to decorate the iron guards with incrustations of gold and silver, although how long before the end of the sixteenth century the first of these masters flourished is still a matter of controversy, some authorities insisting that he worked toward the end of the fifteenth century and others that his date was one hundred years later. Even after the power of the Tokugawa shogunate was firmly established, doubts as to the continuance of peace under this rule naturally remained, and evidence of this may fairly be drawn

from the fact that until well on in the seventeenth century vigorous iron guards were produced in large numbers, although with an increasing tendency toward elaborate decoration.

In the luxurious era of Genroku, covering the last decade of the century and extending into the next century of our reckoning. the art of metalwork received fresh development. Even the armorers of the time, such as Munesuké, produced varied works, of which the raven of embossed steel, recently acquired by the Museum, is a fine example. But the full flowering of the art of decorated guards in various metalsbronze, silver, shibuichi, and shakudowith every variety of inlays and incrustations, came later in that century, and continued, with even excessive luxuriance, until the very end of the feudal system, late in the nineteenth century, and until the carrying of the two swords, the distinctive honor of the samurai, was forbidden by imperial decree. Twice within this period, the tendency to excessive decoration had been checked, notably by Goto Ichijo, working nearly three quarters of the century, and by the work and influence of Kano Natsuo, who survived until 1898, some twenty years after the occasion for the making of honest sword-guards had ceased.

The schools of artists working from early in the eighteenth century are numerous, and the artists of the various schools who became individually famous are too many to enumerate. They are admirably represented in works of great distinction and beauty in the loan exhibition now on view. A tew of the iron guards of earlier makers, notably a large guard signed Kaneiyé, and another signed Yasuchika, a guard admirably wrought in a design of rings by Masanori, and a later guard of varied

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incrustations by Goto Ichijo working under the name of Mitsuyuki, afford excellent opportunity for contrast; but the prevailing charm of the exhibition lies in the variety and beauty of the guards in other metals. Such masters as Sekijo and Teijo, in addition to Ichijo, of the Goto school, Somin of the Yokoya school, Joi of the signed, it appears, with only the name of the owner, may well have been the work of Ichijo himself. Jeweler's art could scarcely go further than in the wonderful guard by Konkwan, picturing a merry boy applauding a servant who has been well entertained on his rounds with New Year greetings. Of the finest quality of shi-





SWORD-GUARDS FROM THE MALCOLM MACMARTIN COLLECTION

Nara school, and such great artists as Konkwan of the Iwamoto family, and Nagatsune, Mitsuoki, Atsuoki, and Hideyuki are shown in examples which we may well believe represent them at their best.

buichi is a guard with simple decoration of plum blossoms by Hokkyū. The immaculate workmanship of Natsuo himself, the last of the very great masters, appears in a guard of exquisite beauty, copied, as





SWORD-GUARDS
FROM THE MALCOLM MACMARTIN COLLECTION

A beautiful shakudo guard, with decoration of waves, by Masahiro, naturally attracts our attention for its severity of design, which invites comparison with the early work of the school of Goto Ichijo, the master who notably revived the declining fame of the Goto family. A shakudo guard showing peonies in bold relief,

the record of the maker tells us, from a guard by Muneharu of the Miochin family; while in a guard, similarly copied by Kazuma of the Umetada family, tribute is paid to Tachibana Muneyoshi, an earlier master of the same family. Finally, we may note the exquisite guard in shakudo of almost satin finish, with design of

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flowering bush, by Teikwan, who records on the guard that he made it in a small cottage surrounded by the forest near the Sumida River, where it flows by Tokyo, in

the era of Meiji, working thus with loving care in the twilight of a vanishing art of unique originality and enduring charm.

HOWARD MANSFIELD.



SWORD-GUARDS
FROM THE MALCOLM MACMARTIN COLLECTION

XXXVI

THE WILLIAM H. RIGGS COLLECTION OF ARMS AND ARMOR

ILLIAM HENRY RIGGS of Paris, son of Elisha Riggs, the well-known banker of New York, Baltimore, and Washington, influenced by his high regard for his lifelong friend, the late J. Pierpont Morgan, and his belief in the important part The Metropolitan Museum is destined to play in the future of the art of this country, presented to the Museum in May of last year his collection of arms and armor, which has long been known to be unrivaled among those of private collectors. The gift was accepted by the Trustees on May 19, 1913, in a resolution which expressed their estimation of the collection as of the greatest value in its relation to the study of mediaeval and Renaissance art, and of their lively appreciation of the spirit of patriotism which led Mr. Riggs to render so notable a service to the people of this country through the Museum of his native city. The Trustees requested Mr. Riggs to act as a Trustee of the Collection during his lifetime, and to supervise its proper installation in the addition to the building, then under construction, and now known as Wing H.

The collection has been shipped from Mr. Riggs's house in Paris, and is now being prepared for exhibition. The date of its installation will be announced in a later BULLETIN.



BURGANET, ETCHED AND GILDED, ABOUT 1550
ATTRIBUTED TO HENRY II OF FRANCE
RIGGS COLLECTION

XXXVII

MR. RIGGS AS A COLLECTOR OF ARMOR

E needs much who would become a successful collector: he should begin early; he should be devoted and persistent; he must have at hand the necessary time and means; he must feel that he has a mission to accomplish; he should have what people call "good luck"; and, most of all, perhaps, he must be born with a "seeing eye" to fit him to pick and choose.

Judged by these tests, William Henry Riggs has had every qualification for a successful career. Even as a child, he spent his time arranging and labeling "specimens" on the shelves of his museum in the top story of the family house facing Bowling Green. When about fifteen he began gathering Indian arms and costumes, and in 1853 he sent to New York one of the earliest ethnological collections from the east slopes of the Rockies, which, unfortunately, was lost soon afterward in a warehouse fire. This collection he brought together on a trip to the West, made in company with his brother Elisha, on the Benton-Beal Expedition. Here, the young collector gained his first-hand knowledge of Indian objects. At one time he had the choice of arms of eight hundred warpainted Pawnees. His collecting instincts in those days sometimes led him into perilous paths. On one occasion he became all but entangled in a herd of bison; and on another, after having been detained on account of a "trade," he was the last to cross a ford, was swept with his horse into the Arkansas River, and was saved only by a long cast of the lasso of one of the guides, the half-breed Antonio de la Rue. After this incident the expedition's leader, Colonel Beal, told off his best guide, Kit Carson, "to keep a sharp eye on that boy."

Young Riggs prepared himself to enter Columbia College; but the death of his

father, the well-known banker, in 1853, was the turning-point in his career. It became his wish to obtain a technical training which should fit him to take charge of some of the family's mining property in the Alleghanies, and on this account he took a journey abroad which, as it proved, changed his life-plans. He reached Paris with letters to the father of the present Duc de Loubat, who advised him to enter the preparatory school of Mr. Sillig at Vevey. Here he became a fellowstudent of J. Pierpont Morgan, then a studious young man whose major interest was mathematics, and who was surprising his companions and instructors by such feats as "calculating cube root in his head." Mr. Riggs and young Morgan straightway became devoted and, as it proved, lifelong friends; both had the collecting instinct and already visited antiquity shops during their numerous excursions. For his part young Riggs soon filled his rooms and pantries with Swiss swords and daggers, some of which were of such interest that they have always kept their place in his collection.

It is doubtful whether Mr. Riggs knew precisely why he came to collect ancient armor and arms, but it was unquestionably from the Vevey period that his idea of a definite mission dated. His collection was to be a national one—"to instruct and please the art-loving people of his country" -and this aim he consistently bore in At that time he certainly had about him no friends who were interested in similar objects and whose rivalry would have spurred him on. But neither then nor later did Mr. Riggs need sympathy or support: he knew definitely what he wanted; if he found that he had made a mistake he profited by it. He always said that experience was his best teacher.

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Looking over our catalogue, I find that most of his objects were purchased between the years 1856 and 1860. His headquarters during part of this time were in Dresden, where he attended engineering courses in the Technische Hochschule. Here, too, he began his studies in archaeology. He haunted the gallery of the royal collection, which was then in the Zwinger,

cates of the royal collection were dispersed, and Mr. Riggs seems ever to have had the first choice of them. One of his best friends at this period, a great lover of ancient armor, was the distinguished director of the Munich Museum, Professor Hefner-Alteneck, and to him the young collector was indebted for important hints. Together they attended the sale of the ancient



PORTRAIT OF WILLIAM H. RIGGS
IN HIS ARMORY IN THE RUE MURILLO, 1013

and it was not long before he was on intimate terms with the director of the armory. Soon, too, he came to meet others who showed a learned sympathy for his interest in armor, and through these new friends Mr. Riggs received valuable suggestions. Luckily, then as afterward his means were such that he did not hesitate to secure the best objects which came into the market. At that time it happened that many dupli-

armory at the castle Hohenaschau, where the objects had been preserved always—the armor hanging on its ancient racks. Mr. Riggs was soon in touch, also, with the Count de Leyden, whose castle at Maxelrein near Munich contained many treasures; these promptly fell into Mr. Riggs's hands. Another friend was the Baron von Arretine, whose collection was also secured.

These years were active ones in Mr.

Riggs's life. For one thing, he traveled constantly, and the provenance of his objects shows how intimate he was with the little towns in and out of Germany, their collectors, and their dealers in antiquities. He visited Vienna several times when he learned there was something interesting in the market. At dinner one evening, he was told by Hefner-Alteneck that certain rare head-pieces, "dog-faced basinets," were about to be sold in the ancient arsenal of Mavence: he took the hint, traveled all night, and was present when the armory opened, thus anticipating the arrival of dealers from Berlin and Paris. So. too, he visited Solothurn when it was disposing of some of the pieces in the ancient civic armory, obtaining thus many suits of Swiss armor and a large series of swords and halberds.

Nor did he neglect the collecting possibilities of Italy. Here he had convenient headquarters in Florence at Lord Normanby's villa, which Mr. Riggs's mother and sister had leased. It was then he came to meet Mr. Stibberts, an English collector of similar tastes, whose remarkable museum has since been presented to Florence. It was then, also, that Mr. Riggs made a great "strike" in securing the collection of Marquis Panciatichi Ximènes, whose wish to dispose of his arms is said to have lasted but twenty-four hours—long enough to enable Mr. Riggs to place the objects in baskets and to carry them out of the palace. There were but 300 objects all told; but these were of delightful quality, and some of them historical, including two wheellock guns which for beauty of ornament would be capital objects in any national collection. Venice also proved a rich collecting field: in those days the shops on the Grand Canal, such as Richetti's and Marignoni's, offered choice arms; and, thanks to his friends, Mr. Riggs was able to visit some of the old palaces, the garrets of which he ransacked minutely. Here treasures were to be discovered: in the lumber rooms he was apt to find the curious "stemmi," which in olden days stood near the palace door and bristled with fancifully carved arms, suggesting the brackets of a gigantic hat-rack, upon

which hung casques and swords of the bygone doges. In the Tiepolo palace, I remember, he made numerous "finds," and incidentally purchased the stamped leather which now hangs in his dining room. This he insisted upon taking down himself; and as a result of his enthusiasm, Mr. Riggs and his valet were blackened and nearly stifled by the sooty dust, the accumulation of centuries, which the removal of every plate of leather brought down upon their devoted heads. In those days, too, he made finds in the old palaces in Genoa, where he secured, by the way, precious Renaissance furniture, including inlaid folding chairs, dating from the end of the fifteenth or the beginning of the sixteenth century, admirably preserved and in their original leather cases: these he obtained above the eaves of one of the Doria palaces. Milan, too, was a well-covered hunting ground. Here he was fortunate in making the acquaintance of the famous Uboldo: for the cavalière di molti ordini, as he called himself, was one of the greatest collectors of armor. For one thing Uboldo had had great chances, bringing together his objects at an early period, mainly between 1830 and 1850, when a choice of beautiful arms was still to be had. He, also, was one of the few amateurs who loved the simple armor of the fifteenth century, which is admirable in its lines and is of the best quality of metal, and he was one of the first modern collectors to prize especially the work of the Milanese family of armorers, Missaglia-Negroli. Uboldo had intended to present his collection to the Italian government; but a slight, real or imaginary, from King Victor Emmanuel hardened his patriotic heart and caused him to turn over to Mr. Riggs almost all of his collection.

In the late fifties, Mr. Riggs discovered that Spain still retained rich hoards of armor. He made in all seven collecting trips there, and on one of them he spent about a year in Seville, where, as well as in Madrid, he secured material of great value. In those days there were few antiquity shops, and it is interesting to note the sources of many of Mr. Riggs's arms. This one was found at a hatter's, that at a



CASQUES, EMBOSSED AND DAMASKEENED
XVI CENTURY, ITALIAN

cobbler's, and that again from a head waiter or a local blacksmith. Sometimes the Spanish gentlemen to whom he had letters would drop everything and proceed to hunt arms for him, and their finds were ever "á la disposición de Usted," gifts embarrassing him frequently by their magnificence. Thus, at Valencia, Don Ramon d'Orcaña presented him with a remarkable suit of armor of scales of an almost



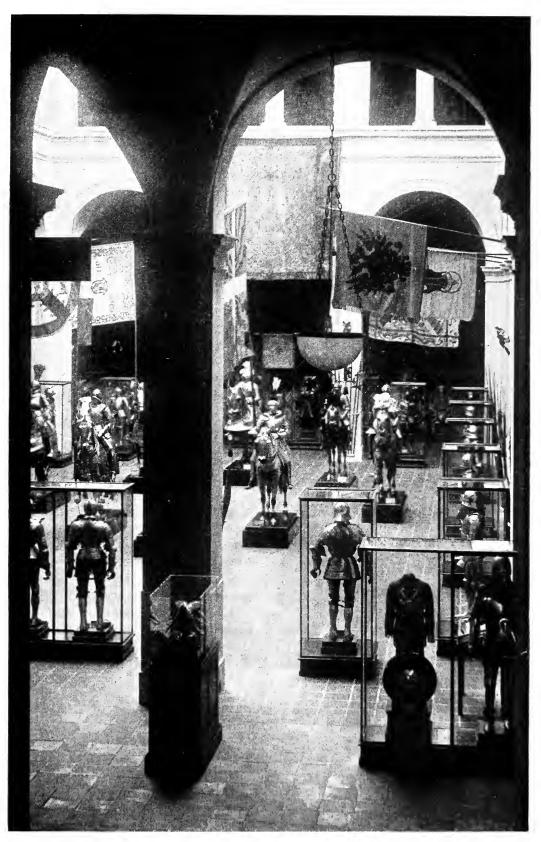
PORTRAIT OF WILLIAM H. RIGGS AS HE JOURNEYED IN SPAIN, 1857

unknown type and with numerous pieces never before out of the possession of his family, including the embroidered hunting belt of an ancestor who had been the grand veneur d'Espagne. At the ruins of Italica he met the Count of Paris and was invited by him to his home in Seville, then in the palace of his cousins, the Montpensiers, who became much interested in the work of the young collector. The Duc de Montpensier, to further his success, gave him letters to friends near and far; and, to aid him in traveling,

turned over to him his versatile valet, Pasquale Rose, who remained long in Mr. Riggs's service. It was soon after this (1858) that Mr. Riggs saw much of Spain out of the beaten tracks. He dressed in the native "Marco" costume and traveled with an elaborate camping outfit; he spent weeks in the saddle, and his acquisitions followed him on a string of pack-mules. In those days by-paths in Spain were not always safe, and more than once he ran imminent risk of robbery and captivity. In fact, he was once "entertained" several days by the notorious bandit, José Maria, whom Mr. Riggs succeeded in impressing so favorably that he was not only allowed to leave without being robbed, but was even sent a present when in Seville.

Mr. Riggs's interest in armor and arms centered in those of the Middle Ages and the Renaissance. Few of his pieces belong to a more modern date than the middle of the seventeenth century. Late objects were left for the collectors whom Mr. Riggs designated as mere "sabretasche men"; and early objects, he came to believe, represented a class by themselves. So he exchanged with the Duc de Luynes his arms of classical antiquity and of the "age of stone." For the great domain of Oriental armor and arms he had never a keen interest. He bought these objects, it is true, when he visited the East, though his journeying there was memorable less as improving his collection than as wellnigh bringing it to an end tragically: he nearly lost his life in a pit of mummied crocodiles when the dust ignited and the whole pitchy mass burst into flames; he was sun-struck at Sinai; and he nearly died of Syrian fever near Jerusalem.

There was apparently but one person who had real influence upon Mr. Riggs's career as a collector, and whom he willingly acknowledges his master. This was Père Carrand, an elderly Norman scholar, who had long been an archivist at Lyons, and had won fame as a discoverer of palimpsests and as a numismatist, but who was especially a lover and collector of ancient arms. To Carrand, as to his pupil, arms and armor had the interest of romance,



VIEW IN THE RIGGS GALLERY

and to acquire them was worth any sacrifice. Although Carrand had but a modest income, this detail did not prevent his collecting, since he was quite willing to economize rigorously. He had cramped quarters in an out-of-the-way neighborhood, and he even cooked his own food; but so far as precious possessions went, he lived en grande prince, surrounded by Gothic armor. Mr. Riggs has still a



PORTRAIT OF WILLIAM H. RIGGS TAKEN IN PARIS ABOUT 1858

bright memory of Carrand's dusty home, in which the staircase leading to the bedroom was cluttered with priceless armets and salades. It was from Carrand that Mr. Riggs first learned the living charm of the armorer's art; and together the two collectors, literally at the feet of Carrand's harnesses, would pore night-long over the pages of ancient Froissart or Olivier de la Marche, reading how armor was made, worn, and used, and how in early times it was preserved and transported. The old collector had the training of a gentleman

of pre-revolutionary France, and when he called upon Mr. Riggs he appeared, as became his dignity, in lace jabot and ornate shoe-buckles. He was singularly unworldly; his only plan for getting money for the purchase of armor was to spend his income in no other way, certainly not to exploit his skill and knowledge as a connoisseur. As an example of this, he is said to have accepted no fee for forming the cabinet of arms of his friend, Prince Soltvkoff, which cost him years of labor. could he be tempted to dispose of the objects in his collection, no matter what bids were made. Only, after his death, when his armor was scattered, did Mr. Riggs succeed in obtaining certain coveted pieces.

It was about 1857, that Mr. Riggs decided to make his headquarters in Paris, and to bring his armor to his hotel in the rue d'Aumale. In Paris at this time there was an exceptionally delightful society of painters, musicians, littérateurs, archaeologists, and collectors, including a brilliant coterie of armor lovers, headed by the Emperor himself. In such society Mr. Riggs was ever persona grata: in fact, his house became a gathering place for wellknown amateurs like Victor Gay, Viollet le Duc, Panguillev l'Haridon, director of the imperial collection of armor which was then housed at Saint Tomas d'Aquin, Baron de Ressmann, Sir Richard Wallace, Count de Nieuwerkirke. surintendant des beaux arts, high in the favor of the imperial family (especially, as gossip said, of the Princess Matilde), Chabrière-Arlès, Prince Basilewsky, Marquis de Belleval, and the romantic de Beaumont, whose swords and daggers have since become treasures of the Cluny; for such painters as Gustave Doré, Fortuny, Henri Pille, de Madrazo, Gérôme; for such musical artists as Patti, Vestri, Strakosh, and Liszt. Here in the rue d'Aumale one might see of an evening, perhaps after a soirée at the Tuilleries, representatives of all countries of Europe, "assisting" at a concert given in Mr. Riggs's theatre, which was built at one end of his great gallery.

It was in 1870, during the Franco-Prussian War, that Mr. Riggs brought his



BUCKLER EMBOSSED AND DAMASKEENED ITALIAN, XVI CENTURY

collection to its home in the rue Murillo (No. 13), near the Parc Monceau, which he bought from Count de Nieuwerkirke. It was an unusual home, even for Paris. It was designed by Le Fuel and is described in Charles Blanc's life of this architect. It had in it a sculptor's studio which Mr. Riggs turned into a dining hall, and he arranged the entire top story of the house for his gallery of armor. In this long room (about 50 feet wide by 80 feet long) stood his series of knightly figures, and its walls were covered with close-set trophies of pole-arms, swords, and armor. But the collection was from the beginning too large for its setting. Many objects, therefore, including even some of the best. had to be hidden from view. Dismembered harnesses and arms filled all the closets, sometimes so closely that it became impracticable to find a desired piece. To Mr. Riggs, however, this was but an incident, and his collecting went bravely The result can readily be imagined; years would go by, and even in spite of his extraordinary memory, Mr. Riggs might forget an early purchase; from time to time, he would make happy discoveries when unpacking long-hidden cases, locked cabinets, or even stored-away clothing for I call to mind the gilded and engraved Gothic spurs which turned up between layers of coats not long ago.

In course of time, the home in the rue Murillo became a place of great interest -sometimes mysterious interest-to all collectors of aimor. Mr. Riggs was ever so busy among his objects, repairing, cleaning, and arranging them, that he found little time to receive visitors. Then, too, he hesitated to show his possessions when they were not mounted properly, or to let a visitor enter his gallery when his harnesses were shrouded in bousses or even when they had not been carefully dusted. His collection, he ever said, would be seen at the proper time and in perfect order. With this in view, he labored constantly, days and weeks, often without taking time even for a walk in the neighboring parc Monceau (I have known him to remain indoors for fifty days at a stretch); most of his time he would be busied in his gallery, usually with an armorer at his elbow—sometimes quite surrounded by armorers, his own *éleves*—intent on removing deepseated rust, replacing straps, or making necessary restorations.

From what has already been noted, it is clear that Mr. Riggs in forming his collection drew from almost every armory, private or public, which came into the market. Among others, we may name the collections St. Maur and Pujol of Toulouse; Medina-Celi, in Madrid; Max Moran of Dijon; Soltvkoff, Saint Seine, Wagner, Just, Pourtalès, de Courval, de Rozière, Davilliers, and Spitzer in Paris: also, de Belleval of Beauvais; Marigoni of Milan: Haussmann of Vienna; and Freppa and Guastalla in Florence. In London his notable acquisitions were from the sales of Londesborough, Meyrick, Magniac, and de Cosson. Important specimens came to him also, directly or indirectly, from their primitive sources, as noted above. I may add that he obtained from the Tower of London a number of excellent pieces of armor, through Prince Soltykoff, who bought them at an auction at the Tower in the early part of the last century. The prince, it appears, breakfasted that day with Sir Walter Scott, who happened to mention that some of the duplicates at the Tower were about to be sold. Mr. Riggs obtained, also, a number of excellent pieces by exchange or purchase from the civic armory of Graz. He secured many objects of the highest interest from the ancient collection of the Dukes of Lorraine. From a church of St. Pol in Brittany, he came into the possession of detached pieces of armor of high epoch. From the Musée Carnavalet in Paris, he secured important accessories. Some of his best specimens came directly from the armories of such châteaux as Langeais, Seraing, St. Julien, Montaubon, and Roumenne.

Mr. Riggs was eminently successful in obtaining objects which had historical as well as artistic interest. We note, for example, a cannon presented by King Henry IV of France to his cousin the Duc de Vendôme; a culverin cast by order of Charles V, in 1523; a number of arms and pieces of armor which belonged to the

house of Savoy; an eared dagger bearing the arms of the family Trevulcio; an early banner of the Medici obtained by Mr. Riggs from the Marquis de Medici in Turin; a stirrup from the tomb of Can Grande; the casque of Louis XIII and a colletin; a number of pieces of armor belonging to Nicolas von Radzivil, the remainder of which are now in the imperial collection in Vienna; the lance-rest of Philip II; breastplates bearing the arms

Julius II of Brunswick, commemorating his marriage with Hedwig of Brandenburg, of the Marquis de Bassompièrre, of the Duke of Alva, of one of the Medici, of a della Rovère, of the Baron Preussing, of a Lallane, of a Duke of Lorraine. A capital piece is the complete equestrian armor attributed to Marcus Antonius Colonna, which formerly stood in the town hall of Bozen and was earlier in the Ambras Collection. There are head-pieces of the Duke



RIGGS ARMOR GALLERY [H.8]

of historical Spanish and Italian families, including one which belonged to the Genoese Doria, and another which formed part of a harness of Philip Guzman; a corselet which was borne by the guard of honor of Louis XIV, and a state partizan. Of objects which belonged to the house of Saxony there is a crossbow with box of bolts of Augustus the Strong; head-pieces and cartridge boxes of Christian I, II, and Johann Georg I; also the coronation gauntlets of an elector, probably Christian 1. Of engraved and gilded gauntlets he has examples which belonged to Henry, prince of Wales (brother of Charles 1) and Philip II. There are suits of half-armor of

of Alva, of the Marquis de Trémouille, of Ferdinand of Tyrol, of Henry II, of Charles V, of one of the Grimani, of a Visconti, of a Tiepolo, and two which were borne by members of the family Montinengo of Brescia. There are reinforcing plates of the helmets of an elector of Bavaria, of Charles V, and of Philip II. Among the guns is an elaborate one which belonged in the Ambras Collection. There is a pistol which belonged to Charles V and is pictured in the state catalogue dating from the later part of the sixteenth century.

The size and the scope of Mr. Riggs's collection, as shown by a card catalogue prepared during the past year, is as follows:

Suits and half suits of armor 59; detached pieces of armor 328 (of these 180 are helmets); banners 18; horse's bits 37; bows and crossbows 47; cannon 2; daggers 62; fire-arms, accessories (powder-horns, primers, bandoliers, keys of arquebuses) 93; guns 24; shafted weapons (lances and halberds of all forms) 486; horse-trappings, including saddles and armor, 50; mail 35; maces and short pole-arms 58; musical instruments (war-horns, drums) 20; pistols 38; swords 286; sword accessories (belts and carriers) 34; spurs 53; stirrups 27; shields 68; instruments of torture 14; miscellaneous 8—making all together 1,847. Not included among these are several suits of armor which Mr. Riggs retains in Paris until they can be put in order; also a number of daggers and detached pieces, about a hundred in all. The total number of objects in the collection is perhaps not far from 2,500, since in a single catalogue number there are often two and sometimes a series of pieces.

At one time, it appears, Mr. Riggs had in his collection as many as 8,000 objects, but he carefully weeded them out, occasionally exchanging many commoner pieces for one of higher class, and sending at various times consignments to the hotel Drouot for public sale.

Parts of the collection have been placed on exhibition in Paris three times: in 1878 at the Trocadéro, where the objects filled a hall 20 meters by 12; in 1889 at the Invalides, where 3,500 pieces were shown; and in 1900 at the Palais des Armées, where there were exhibited a thousand richly decorated arms. It was at these times that the extraordinary character of Mr. Riggs's collection came to be generally known, and many of the specimens were photographed or sketched by visitors who, like Dr. Boheim of Vienna or Dr. Forrer of Strassburg, have since published their notes. Other objects had, however, been figured earlier in Skelton's book on the Meyrick Collection or in various special works such as Asselineau's Armes et Armures or in Viollet le Duc's Dictionnaire, of which the volume on armor was partly written in Mr. Riggs's gallery and with his constant help —as indeed were later the numerous articles dealing with armor and arms, by Victor Gay in the Glossaire Archaeologique.

From the foregoing notes it will at least be seen that Mr. Riggs has been successful in his collecting activities. On the other hand, it is difficult to estimate the importance of his collection compared with all others. We can safely say that among private collections it was the first, the only one at all approaching it being that of M. Georges Pauilhac in Paris. Its especial interest lies in its great number of historical and decorated pieces, and in its arms of high epoch. In certain regards it is probably first in rank even among national collections. In the series of shafted weapons it contains, I believe, a more representative series than even the collection in Vienna. Its horse frontals are noteworthy, few museums excelling it either in the choice or in the quality of its pieces. And this is equally true of its shields, helmets, powder flasks, and horse's bits. In showing the evolution of armor from the fourteenth century to the eighteenth, the Riggs Collection stands, I think, among the first ten collections in the world. In no other collection, for example, can one see reinforcing plates for brigandines, or pieces of primitive armor of boiled leather. Nor are there extant more interesting details in showing how armor was lined and worn.

In estimating Mr. Riggs's activities as a collector, one cannot forget as one of the elements of success, as we noted in the beginning, the rare good fortune he has had on many occasions. It is true that he collected at a time when armor was still in the market, but he had ever an extraordinary way of being at the right place at the right time. Mr. Riggs would, however, be the first one to admit that he had not always made the most of his opportunities. I have heard him declare repeatedly and mournfully that his present collection is but the poorer half of the objects which at various times were offered him. It is clear that he lost a monumental opportunity when he returned handsomely to the Count de Nieuwerkirke the objects which he had actually bought from him but which he allowed Nieuwerkirke to pass

NOTES ON ARMS AND ARMOR

into the hands of Sir Richard Wallace. Because Nieuwerkirke was his friend, Mr. Riggs would not prevent his disposing of his armor and arms at a much higher price than he himself paid or was willing

failed to send at once to his home. It so happened that the Prince changed his mind, returned the purchaser his cheque, and resold the armor to the Emperor Napoleon, from whose hands it passed into the na-



BREASTPLATE

MADE BY PAULUS DE NEGROLI

MILAN, MIDDLE OF

XVI CENTURY

to pay for them, and he thus lost the opportunity of acquiring numerous objects of the highest importance—some of the best, in fact, now in the Wallace Collection. So, too, Mr. Riggs has justly deplored losing the remainder of the Soltykoff Collection, which he had bought but

tional collection now shown at the Invalides.

However, these are details. In the minds of all who are interested in this field of art, the Riggs Collection stands as the last great collection of arms and armor, brought together by generous means and a life's devotion.

XXXXVIII

NOT A BANNER BUT A BYZANTINE ALTAR CARPET

HE Museum lately purchased an embroidered banner-shaped "panel." 166 cm. in height, which bears a double-headed



BYZANTINE ORLETZ

eagle, crowned, gray in tone, on a background of yellow satin. Received among a number of ancient banners, it was looked upon as a processional standard, all that was known of its antecedents being that it had been sold in 1905 in the hotel Drouot, among the objects of M. Boy, where it was described in the sales catalogue as "art russe, XVII siècle."

When received at the Museum and more closely examined, the "banner" grew in interest. Its form, the shape of the crowns, and the ornamental inset bits of glass and stone, suggested an early date. An inscription in what appeared to be ancient Russian was borne in a circular cartouche

on the eagle's breast and this at once furnished a more definite means of identification. Accordingly, photographs were sent to Professor Uspensky, Conservator of the Museum of St. Petersburg, and from the notes which he generously prepared for the Museum it appears, in the first place, that the embroidery is not a banner, nor is it Russian. The inscription in Byzantine characters reads: $\Pi A \Upsilon A O \Sigma \mid \Pi A$ -TPIAPX- $(H\Sigma)$ KQNSTANTINOY $(\Pi O \Lambda E \Omega \Sigma)$ KAI NEAS POMHS, giving us the indication that the embroidery dates from the time of a certain Paul, patriarch of Constantinople and New Rome. It is evidently an altar cloth, "the clergy not being in the habit of employing such banners." and "most probably the said cloth was part of a carpet which was spread under the feet of a ministering bishop of the Greek church. Such a carpet goes under the name of 'orletz'." Professor Uspensky adds that on account of "the closeness of the ligatures in the inscription it is very difficult to assign the cloth" to one of the earliest patriarchs bearing the name, e. g. Pauls I-IV, who officiated between 340 and 784. He finds, however, in the lists a Latin patriarch of Constantinople who ministered in Rome in 1366-1372, and "to him we might assign your piece of cloth —the more so as the Latin patriarchs have been obliged to celebrate mass according to the Greek rite."

There was certainly no other Paul between this and the end of the patriarchate in 1452. Additional reasons for associating the orletz with this patriarchappear: (1) In the form of the eagle:—it resembles the one dating from the fourteenth century appearing in Kodex 442 in the library of Munich, and, on the other hand, it is quite unlike earlier eagles; in fact, the double-headed form is hardly earlier than the tenth century. (2) In the

NOTES ON ARMS AND ARMOR

treatment of details:—the wings are quite similar to those appearing in an embroidered dalmatic of the fourteenth century in the sacristy of St. Peter's.

Further details on the Byzantine inscription have now been received by the writer from his friend Mr. Michel L. Kambanis of Athens. In his letter M. Kambanis calls attention to the character B in the circle as a letter much discussed: "M. P. Lambros had a personal theory and sees that it means $\pi \nu \rho \epsilon \nu \delta \lambda \alpha$. M. J. Svoronos sees there a monogram of the Palaeologues equivalent to $B\alpha\sigma \iota \lambda \epsilon \nu \varsigma \mid B\alpha\sigma \iota \lambda \epsilon \omega \nu$." In the same circle the lower character at the left "may be read $\Delta O \Upsilon KA$, the middle one $\Pi ATPIAPXO \Upsilon$, the right

one ΠΑΛΑΙΟΛΟΓΟΥ. I do not give this with certainty since monograms may be read in different ways. But if you consult in the 'Bulletin de Correspondance Hellénique' les rapports de Millet sur Mistra you may see there similar monograms." All of which, it appears, strengthens the evidence that our orletz was prepared for the patriarch who flourished in the middle of the fourteenth century.

It is hardly necessary to add that as an example of the art of the late Byzantine embroiderer this object may be given a prominent place—if indeed for no more satisfactory reason than that its rivals are few, even in national ecclesiastical collections.



CENTRAL MEDALLION OF ORLETZ



XXXXIX

AN ITALIAN BOW AND QUIVER OF THE RENAISSANCE

R. JOHN MARSHALL, writing from Rome, called the attention of the Museum to an early set of archer's arms, including bow,

arrows, and quiver, which were not only of European origin, but of high epoch, believed to be of the fifteenth century. Arms of this kind are, of course, well known in historical pictures, but actual specimens, any in fact more than a century old, are exceedingly rare. No one took the pains to preserve them when they were common, for one reason because bows soon lost their strength, hence became valueless, and for another, because they were rarely ornamented or enriched, to give them interest as objects of art.

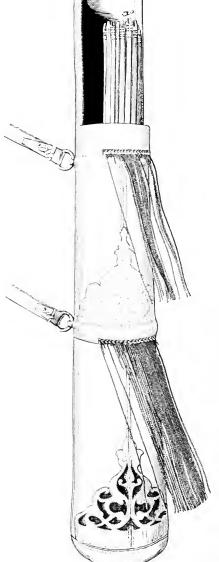
The specimens in question, later obtained from a Roman antiquary, proved to be of artistic as well as of archaeological The bow, espemerit. cially, was not only a good one, but richly decorated. Each horn tip was developed into a dragon's head, and the flat face, now inverted and becoming the concave side of the bow, bore a delicate Italian ornament (see above), painted with free, strong lines in yellow on

a dark red ground. The first impression was that the arm was Oriental or semi-Oriental, since its type was distinctly Turkish, and it was built up of the characteristic parts of eastern bows—an outer layer of sinew, a middle of wood, and an inner of horn. But further examination showed that these were not put together

> in the Oriental fashion: then, too, its ornaments gave proof that the bow was not eastern but Italian. Decisive in this matter was a coat of arms which appeared delicately painted, below a transparent plate of horn near one of the tips. This showed (as Messrs. R. T. Nichol and B. M. Donaldson have kindly determined for the writer) that the objects belonged to, or were connected with a branch of the well-known Neapolitan family Capece-Galeota.

The quiver¹ is cylindrical in type (about 70 cm. larch, light (31 grammes), with small heads and

long) and fairly well preserved, shaped in calfskin over a wooden button-like terminal, and decorated with ornaments of leather applied upon silk velvet, red and green. From the foremost of these ornaments hangs a long fringe of green silk, of which, however, only a few strands (20 cm. long) remain. Anumber of arrows are present, which are short (62 cm.), made of



ITALIAN QUIVER, ABOUT 1500

traces of four guide feathers on the neck,

¹Compare with our quiver the one described by Baron Potier as dating from the XVII century in Zeitsch. hist. Waffenkunde, Vol. IV, p. 83. which is also decorated with color in bands and lines, in some cases gilded.

The objects, it was found, had an excellent provenance. They were discovered in the lumber room of a church in northern Italy (near Brescia?), where they had formerly hung above an ancient statue of St. Sebastian. We infer, accordingly, that the objects represented an *ex voto* of a time of plague, when St. Sebastian would have been the saint of recourse.

Reference to Italian "documents" of the fifteenth and early sixteenth centuries leaves little doubt as to the dating of our accessions. A similar bow, showing even the type of ornament on the outer face, was figured by Benozzo Gozzoli, who died in 1498. A similar type appears in one of Carpaccio's paintings, which antedated 1520. Still another, of like form, is shown in a Martyrdom of St. Sebastian, by Giacomo da Milano, dated 1524. There is a fresco in Ferrara in the Palazzo Schifanoja in which a similar bow and quiver appear at a date not far from 1480. We may mention also the bow and quiver shown in a fresco by Pinturicchio in Rome, in the Borgia apartments, earlier than 1513; and finally the bow in one of Signorelli's St. Sebastians, which antedates 1523. present objects, therefore, probably date between the later years of the fifteenth and the first decades of the sixteenth century.

As far as the writer can learn, the present bow and quiver are not only the best but the earliest of their kind extant. The only ones which at all approach them in quality or in period, though these are probably later by about a century and are not definitely of European origin, are preserved in the Museo Civico Correr in Venice, where are hung the arms and trophies of General Morosini of the Peloponnese.

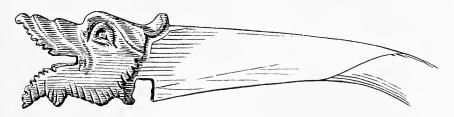
From a technical standpoint the present

bow is noteworthy. It was large for its type (about 1.26 m. in length), excellent in workmanship, and of great strength. It is probable that the present arm would, at a pull of sixty-five kilos, have thrown a flightarrow a distance not less than four hundred meters. This, at least, would have been the range of a similar Turkish bow, regarding which we have accurate data furnished by Sir Ralph Payne-Galway, in the appendix to his work on the Crossbow (Longmans, Green, 1907). It appears from the studies, documentary and practical, of this authority that composite bows of horn and sinew are by far the best for distance shooting, the English longbow in spite of its wide renown having



COAT OF ARMS ON END OF ITALIAN BOW

an average range of scarcely more than two hundred meters.



TERMINAL ORNAMENT ON ITALIAN BOW

A GIFT OF JAPANESE SWORD-GUARDS

APANESE tsuba, or sabre guards, have ever appealed to the lover of Eastern art. They are exquisite in design and workmanship, beautiful in color and contour, and picture in miniature a wide range of the artistic history of Japan. That they have ever been numerous—and this is not always a trial to an earnest collector—one can well understand, for in the feudal days of Japan each member of the military class carried his familiar two swords, and for each sword he had a choice of tsuba, rarely less than a dozen and sometimes even hundreds, which could be changed to vary the appearance of his treasured blades from day to day, or month to month. If, then, we estimate that there were two millions of samurai in 1876, when prime-minister Sanjo signed the decree forbidding the carrying of swords, we may assume that tens of millions of swordguards came sooner or later into trade. It is certainly a fact that about 1880 the markets of all "curio"-loving countries were flooded with sword-guards, and that never before or since have such admirable specimens, in any number at least, found their way out of Japan.

On the other hand, it must not be supposed that Japanese gentlemen ceased in a moment to prize an ancestral sword-guard, when they had no longer the need of wearing swords. It was merely that at this time they revised their collections, and cast out those tsuba to which they were least attached. In the majority of cases in which they gave up a costly specimen, it appeared to be the latest or newest which found its way to a shop in Kyoto or Tokyo.

It was the feeling, doubtless, that the newer sword-guards were of higher grade which led Mrs. Adrian H. Joline to specialize in her collecting. In the eighty odd examples which she has just presented to the Museum one finds types which are excel-

lent, and which are particularly acceptable since the Museum has had, up to the present, no series of tsuba of its own. The only important examples hitherto shown have been borrowed, e. g., from the collections of Mr. Howard Mansfield and Mr. Malcolm MacMartin.

The present donation, then, forms a comfortable foundation for the study of a highly specialized branch of Japanese art. It enables a visitor to appreciate the work of some of the best schools or families of tsuba artists, including Kaneïyé, Goto, Miochin, Tetsuwo, Umétada, Soten, Shoami, and Kinai, and it gives many of the varieties of guards which each collector comes to recognize. Thus it furnishes types of sculptured guards in iron, copper, and various bronzes. It includes a series of guards incrusted with designs in other metals, as bronze on steel, or silver on bronze. As an instance of the former, we recall a small tsuba in the style of the first Nishigaki master, Kanshiro Yoshihiro (1613-93). The collection contains a number of guards in which the figures or patterns are inset or inlaid, rather than incrusted, notably several with inlays of pewter in the style of the fourteenth or It also illustrates fifteenth century. pierced guards in great variety: some in the fashion of four centuries ago when the decoration was carried out broadly, some in the style of the sixteenth and seventeenth centuries when perforations became so numerous and intricate as to transform a tsuba into a disk of interlacing fibres, as in the work of the artists who followed the Chinese manner. Other guards exemplify the work of essentially modern schools. There are a number showing a background of delicate stippling which the Japanese called "nanako" (a pattern suggested by the texture of fish roe), and which was in vogue in the late eighteenth and early



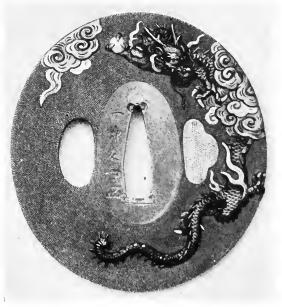
SWORD-GUARD IN THE STYLE OF KANSHIRO YOSHIHIRO (1613-93)



SWORD-GUARD WITH PIERCED DECORATION IN CHINESE STYLE. XVIII CENTURY



SWORD-GUARD BY TAKECHIKA ABOUT 1850



SWORD-GUARD WITH "NANAKO" BACKGROUND, DATED 1820

THE METROPOLITAN MUSEUM OF ART

nineteenth century. One of these is a "composite" guard, the figures which it bears in relief having been executed by three different artists, Koran, Ichijo, and Tojo: its theme is the varying beauties of spring, summer, and autumn, the first typified by fireflies, the second by butterflies, the third by a dragon fly. Another "nanako" guard bears the date 1829 and is decorated with a dragon finely sculptured in gold bronze. We may refer also to a dragon tsuba by Takechika, of even later date—about 1850—which is an admirable specimen of its kind: here the

storm-monster appears in bold relief, emerging from a swirl of waves. We note, finally, one of the newest guards (dated 1861), an excellent example of the fine-spun taste in sword mounting at the time of the breaking down of the Tokugawa shogunate. In this tsuba the background is incised with undulating lines, representing low waves, and it is surcharged with crests of the daimyo Arima. Noteworthy in this specimen is the decadent treatment of its margin, which is overlaid by the same crests moulded as though flexible around the rim of the guard.





XLI

THE OPENING OF THE WILLIAM H. RIGGS COLLECTION OF ARMOR

HE opening of the Riggs Collection of European Arms and Armor has now been definitely fixed for the evening of Monday, January 25, when the Trustees of the Mu-

Riggs formally announced his great gift to the Trustees, a year ago last May, he made the special request that his collection should not be exhibited by itself, but should be amalgamated with the other objects of



MAIN ARMOR HALL

seum will give a reception, with music, to members and their friends. Thereafter the collection will be permanently open to the public in the spacious halls and galleries which were especially designed for it and for the other arms and armor, both European and Oriental, which constitute this department of the Museum. When Mr.

the same character in the Museum, saying that his purpose in forming the collection had been the education of the American public in a branch of European art which was little known or appreciated in our country, and that this educational purpose could be properly fulfilled only by keeping to a strictly chronological arrangement of

all the material illustrating the subject, from whatever sources the Museum had acquired it.

In arranging the collection Dr. Bashford Dean, the Curator of the department, has followed this magnanimous request in the spirit in which it was conceived. Consequently the pieces from the Dino and Ellis Collections, as well as those which have been acquired individually, have been placed among the Riggs specimens in proper historical sequence, the labels indicating the source from which each was derived, with the result that the Museum is now able to show as a unit a collection of European arms and armor which will rank among the most important in the world, and one which could not be duplicated today at any price, since examples of the high quality represented in it are no longer to be found outside of the great royal and public collections of Europe.

This collection occupies the large court beyond the Egyptian galleries, at the northern end of the building, directly under the galleries in which the Morgan Collection is exhibited, together with the colonnade surrounding it, a hall one hundred feet long beyond, and a smaller room in the corner, roughly speaking, about 18,000 square feet of floor-space in all. In addition, two galleries opening from the eastern side of the court are devoted to the collections of Oriental armor, one to that of Japan, and the other to those of Persia and India.

Some account of the Riggs Collection, and of Mr. Riggs's experiences in forming it, was given in the BULLETIN of March, 1914, pp. 66-74, and as it is fully described in the Handbook prepared by Dr. Dean, to be issued at the time of the opening, details need not be entered into here. It may safely be predicted, however, that the exhibition will come as a delightful surprise and revelation to many, and that its attractiveness will be by no means confined to those who have been students of armor as such. People who are not, or who have hitherto thought they were not, interested in this subject will certainly be impressed with the dramatic quality of the display as a whole, and the manner in which it quickens the imagination to a realizing sense of one important phase of life in the Middle Ages and the Renaissance. Upon examining the objects in detail, they will find a wealth of beauty of design and decoration which will convince them that the artistic skill and labor expended upon the execution of a cup, an ivory, or a bronze were fully matched by the makers of arms and armor. and that their products are not to be overlooked in the study and enjoyment of the fine arts. The armorers ranked high among the craftsmen of their day; and hereafter, thanks to Mr. Riggs, one need not go farther than our own museum to appreciate how thoroughly their reputation was deserved.

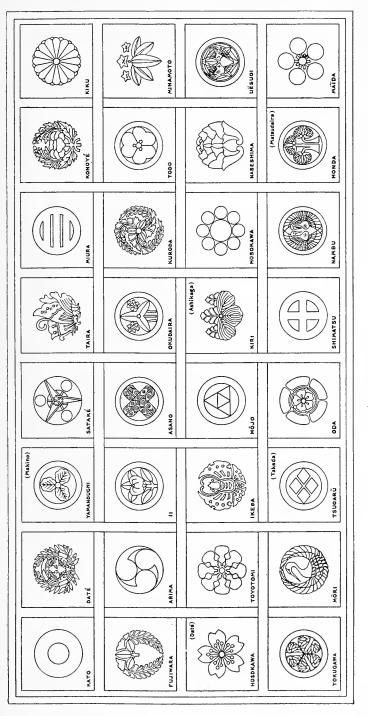
EDWARD ROBINSON

The enormous amount of work involved in the receipt and preparation for exhibition of the William H. Riggs Collection, great in itself, but largely increased by the task of assembling with it the other collections of armor belonging to the Museum, has been completed; and the remarkable display was opened to the members and their friends on Monday evening, January 25th.

Following the recent custom at receptions, the guests were received in the main Fifth Avenue Hall, by the First Vice-President, Joseph H. Choate, a committee of the Trustees, Messrs. Peters, Mansfield, Walters, and Macy, Mr. Karrick Riggs, a nephew of the donor, and the Director. Music was furnished by members of the New York Symphony Orchestra under the leadership of David Mannes.

The following gentlemen were invited to assist the curator, Bashford Dean, in showing the collections: Clarence H. Mackay, George C. Stone, F. G. Macomber, Alexander M. Welch, Albert Gallatin, Howland Pell, Lawrason Riggs, T. J. Oakley Rhinelander, Ambrose Monell, Edward Hubbard Litchfield, and William B. Osgood Field.

Simultaneously with the opening of the new galleries containing the William H. Riggs Collection and the other collections of



CRESTS OF DISTINGUISHED JAPANESE FAMILIES
CEILING IN HALL OF JAPANESE ARMOR
AFTER DRAWING BY HASHIME MURAYAMA

THE METROPOLITAN MUSEUM OF ART

arms and armor, a Handbook descriptive of the armor was issued.1 This includes the armor of the Far and Near East (Japanese, Arab, Turkish, Persian, and Indian), as well as that of Europe from the earliest examples to that of the late eighteenth century. It undertakes no detailed description of individual pieces, but treats the subject from an historical point of view, illustrating the development of arms and armor by reference to objects in the Museum collection. Some idea of the scope and character of the Handbook may be obtained from the following list of its chapters: I. Introduction; II. The Present Collection and Its Arrangement; III. Earliest Arms and Armor; IV

¹Handbook of Arms and Armor, European and Oriental, including the William H. Riggs Collection, New York, January, 1915. (XVI) 161 [1] pp. 65 plates. Octavo.

Arms and Armor of the Bronze Age and Classical Antiquity; V. The Early Centuries of the Christian Era; VI. Chain-Mail and Mediaeval Armor; VII. The Period of Transition from Chain-Mail to Plate-Armor (1200-1400); VIII. The Period of Plate-Armor and Fire-Arms (1400-1780): IX. Questions about Armor: Its Weight and Size; X. Japanese Arms and Armor; XI. Arms and Armor of the East: Arab (Saracenic), Turkish, Persian, Chinese. Appended to the Handbook is a list of personages and families whose arms, personal or state, are here represented. The length of this is in itself an evidence of the rare historical importance of the collec-The numerous half-tone illustrations reveal something of the beauty of decoration and artistic workmanship that characterize armor.



XL11

AN ARMORER'S WORKSHOP

HE visitor to the Riggs gallery, examining a suit of ancient armor, is apt to think rather of the beauty of the object than of the

Gothic woodwork,¹ one may now look at the restoration of an ancient work-bench. On one side of it is a bench-vise: this dates from the early seventeenth century and is



"ARMORER'S WORKSHOP," RIGGS GALLERY

labor and skill of the artist who made it. The armorer, it is clear, encountered many-sided mechanical difficulties in handling his "medium": he could not model steel with the same nicety and fluency with which a brother artist used his paint, clay, wax, wood, silver, or gold. Accordingly, with a view to making clearer the art of armor-making, it has seemed worth while to show to the general visitor some of the special implements or instruments which the armorer employed, and on the west side of the Riggs gallery, framed in splendid

of North Italian workmanship, boldly decorated with foliation and mascaron—a vise which might have been used by an artist who prepared the locks and mountings of the enriched pistols and harquebuses shown in neighboring cases. Here, too, are numerous anvil-like "stakes" which were held in sockets in the bench or

The rear of the courtyard of an ancient house at Abbeville (early sixteenth century), showing a door and the front of a stairway: also some original panels. The woodwork of the bench is modern.

when of greater size were thrust into a heavy block nearby. Some of these in our restoration are fitted in a block which is known to have served for several generations of armorers. Such stakes show surfaces sometimes flattened, sometimes rounded, sometimes long and developed as prongs,—shapes which were required in the varying processes of modeling plates of



VISE, NORTH ITALIAN LENT BY AMBROSE MONELL

steel into subtle curves. Some of the stakes, it appears, were made to penetrate ridges and cavities, as within the crests of helmets; others were arranged to develop the cylindrical elements of armor for arms and legs. Near the present stakes there are exhibited files, punches, and chisels, and patterns for various plates of armor; also matrices by means of which borders were rolled over or pressed into the forms of roping which one sees so frequently in armor of the sixteenth century. These

tools, it may be remarked, are in many cases old, some of them dating from the time when armor was made for actual service. The most important object in this little collection is an anvil, richly wrought, which dates from the sixteenth century—if not earlier. It is probably of Italian workmanship and, with the neighboring bench-vise, has been borrowed for our present purpose from the collection of Ambrose Monell of Tuxedo. The anvil is boldly modeled, wrought in iron, its upper surface faced with steel; its base is octangular, ornamented with beveled mouldings; its sides are developed in rounded arches, partly by welding in position masses of iron, partly by strenuous chiseling. The quality of the object suggests that it was used for work of the costliest character, that gold or silver may have been beaten upon it; but its large size, massive construction, and roughly worn and hammered surface indicate altogether that it could not have belonged to a goldsmith. We know, moreover, that anvils of similar shape have been pictured for iron-workers. Thus, one of them appears in a portrait by Hans Memling in the Hôpital Saint Jean in Bruges and two others were painted by Breughel in his Vulcan's Forge. So we justly conclude that the present object with its elaborate ornamentation could have been used only by an iron-worker and an iron-worker of quality—which means, in all ancient rules, an armorer.

In addition to anvil, vise, and stakes the visitor sees in our workshop a rack of implements of different sizes and kinds. There are hammers of various forms which were used for spreading metal or drawing it together during the various operations of making armor. Some of our specimens date from the seventeenth and eighteenth centuries and are part of the Klein-Tachaux Collection which the Museum acquired a few years ago. It may be remarked that an armorer used in his calling hammers of many kinds, a score of types being known, so that an ancient outfit which included examples of various weights of these different types might readily have in it a hundred, or even two hundred hammers. In the second row of the rack appear im-

plements of several sorts. Among these are armorers' pincers, some of them intended for cutting. One of these is a ponderous affair, beautifully wrought and provided with a screw-driver at the end of an arm. There are also calipers, punches for leather, clippers for metal plates, a die for cutting screws, and an ancient hack-saw—the last dating not later than the seventeenth century. At one end of this improvised workshop there is hung an armorer's certificate, a document dating from the eighteenth century, which showed that a certain Christian Wagner was officially recognized as a member of the guild of armorers and could be recommended to do a certain quality of work; he was "true, hardworking, quiet, and law-abiding." was issued by the guild at Dresden. On the wall near this certificate is a small statue of St. Eloi, patron of hammerworkers. He is here represented shoeing the horse's foot which he had deliberately chopped from the living beast. The creature, it appears, had been in a furious temper, and otherwise "possessed of a devil," so the saint took this cautious means of accomplishing his work, later performing a miracle in restoring the leg to its place! On either side of this little fifteenth-century figure are hung horseshoeing irons used by sixteenth and seventeenth-century smiths, which are not inappropriate in their place, since armorers and blacksmiths, especially

in small communities, were not far apart in their craft.

The Gothic woodwork which has been noted above as a frame for the armorers' implements, has, in passing, a second function. It incloses, visible through the doorway, many modern forgeries of armor. These may here be examined, close to the cases containing authentic objects, yet kept apart from them in an inconspicuous limbo of their own. The false pieces exhibited date mainly from the middle of the nineteenth century: some of them are as early as 1820-30; others are quite recent—même chaudes, as a French expert put it. It may be explained that the present collection aims to give examples of the work of the best-known copyists and counterfeiters, so that the student may conveniently learn to distinguish the kind of objects which are usually found in the shops, and not infrequently, alas, in museums! The present collection is apparently unique, not as a collection, of course, for several private collections include a ten times more costly series, but as an out-and-out gathering of forgeries, with names of makers, places, and approximate dates-notes, by the way, which have proved by no means easy to gather, since the authors of such objects are not in the habit of signing their work and are otherwise averse to publicity. But the subject of forgeries is a special one and may later be made the theme of an article.



ANVIL, ITALIAN, XVI CENTURY LENT BY AMBROSE MONELL



STIRRUP ATTRIBUTED TO DIANE DE POITIERS
RIGGS COLLECTION

XLIII

DIANE'S STIRRUP1

ROM graceful pointed toe to rounded heel,
Despite the dust of years does romance cling
To this small piece of metal that belonged
To her who was the ruler of a king.
Graven and pierced as if the armorer
In pride had fashioned it most lovingly,
And cut above the letters intertwined
Deep through the iron sole, a fleur-de-lis.
Wearing her black and white, a kingly hand
Mayhap has held her stirrup, bending low
To lift her in the saddle carefully
When rode she in the woods of Chenonceau,
A-hunting like her namesake goddess fleet,—
The fleur-de-lis of France beneath her feet.

ESTELLE LEASK.

¹This sonnet was written in the Riggs Armor Gallery by a visitor who had just examined a stirrup of Diane de Poitiers.

XLIV

AN EXPLANATORY LABEL FOR HELMETS

MUSEUM, like a person, is apt to have special ideas in matters of labeling. In many instances labels give little more than a name, some museums believing that the objects should speak for themselves. Other museums, sympathizing with Professor G. Brown Goode, prepare labels which give information to the hungry—in large portions. Either extreme has evidently its good and bad features. Short labels irritate an intelligent reader by telling him that a spade is a spade, and a really long label, unless written in a masterly way, is avoided by nearly every one; for, sooth to say, an outsider does not often come to a museum with a fixed intention of learning at any cost. He likes, rather, to "nibble" and he is apt soon to get tired. If, therefore, a curator wishes to find how his labels are read and how they could be bettered, he should hover about his own cases and listen to what his callers say to one another reversing his manners (and bruising his emotions sometimes) for the good of his department!

There is no question that long labels will sometimes be read; but one hardly knows beforehand just which objects are the most attractive. The ones which you and I would select are often by no means those which appeal to the general public. such a degree is this true that even the mildest curator may decide to write his labels as he is convinced they ought to be written, "in the sight of God," and let the public enjoy them or not. I have often noticed that people will be drawn to a long label if there is a picture in it, and a diagram, large and complicated, is sometimes appreciated by visitors whose externals do not suggest studious habits.

In a general way, I have come to the conclusion that a visitor likes to see the reasons for things—more often indeed than many imagine. And he is confused by dissociated objects: he feels satisfied if what he sees in the cases can be brought together in his mind as belonging to a plan. He knows that kinds and styles grade into one another and he has a notion that the first form begat the second, perhaps in a vaguely evolutional way. Now I believe that this is a widespread trait or state of mind which can be taken into account in our label-writing. In this direction it seems at the outset, I admit, unpromising to prepare labels which deal with general questions, say in the matter of evolution;¹ but if this can be done successfully, the return is worth the time and trouble it costs. For instance, I am inclined to believe that an interesting and very instructive diagram might appear in an exhibition of ancient furniture to show the changes which have taken place during the centuries in so familiar an object as a chair; or that in a gallery of ancient sculpture diagrams might attractively show the way in which the figure changed its mode of drapery during different centuries; or that picture-labels can point out that such objects as watches or clocks developed during the past three or four centuries in an orderly sequence; or that in the hall of arms and armor diagrams can indicate that swords, daggers, or polearms changed their shapes and structures in the course of time in regular progression.

¹ Evidently not strictly to be compared with the evolution of living beings, since these pass their changes along from parent to offspring, while "evolution" in objects represents only sequences in style. The latter kind of transformation, however, affords close analogies with the former and in some cases stops little short of true evolution—as when objects represent the work of the brains and hands of generations of the same family of artists—for here the product of organisms can be measured in terms of parent and offspring, somewhat in the fashion that the secretions of gland might be measured, a process which, all will admit, concerns true evolution

In the field of armor let us take a concrete example—the way in which the various forms of helmets arose from simpler beginnings.

In such a label, on page 115, we may trace the transformations which took place in helmets of usual form from early times down to 1700. In the diagram, one calls attention first of all to the nature of the object and its characteristic parts: it thus includes a picture of a well-developed helmet showing such structures as a bowl, crest, visor, ventail, chin guard, and neckplates. The remainder of the label would illustrate the way in which these structures came into being. We may look over the pictures of the various helmets and see at a glance that the oldest part was the bowl, or timbre, that the visor was next in point of age, and that the ventail, chin guard, and neck-piece were of later origin. The label should, obviously, speak for itself: none the less, it shows so broadly the history of the helmet that one is tempted to explain it in detail.

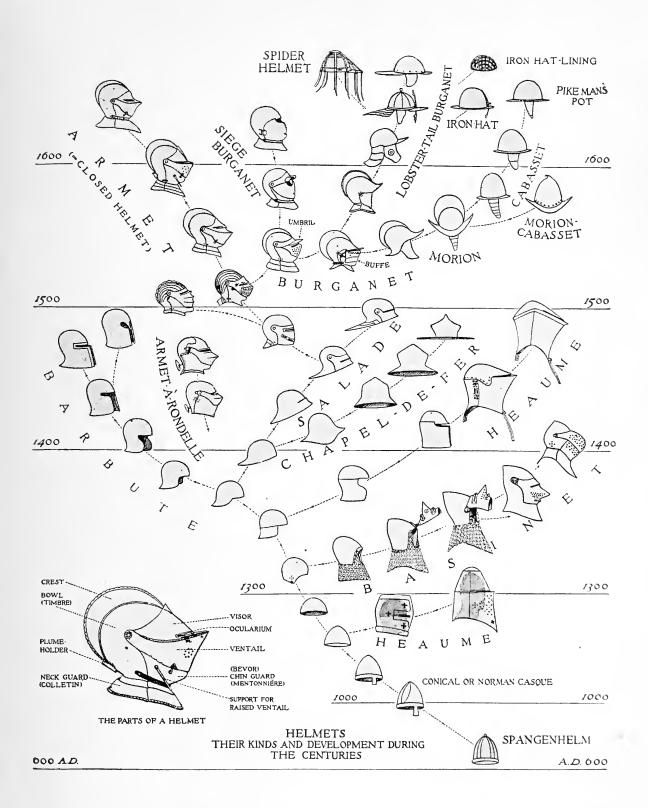
We notice, in the first place, that the label suggests the pictures in a zoölogical or geological handbook, where one traces the genealogy of horses, shells, or fishes. The "geological horizons" are in this case marked off horizontally as centuries—thus the lowest horizon in the present figure is about the time of the dispersal of the European nations, say A. D. 600.1 level would be represented by the year 1000, others would be 1300, 1400, 1500, and 1600. And upon this chronological scaffolding helmets are shown "evolving." Thus, according to our diagram the usual type of an early European helmet was a "Spangenhelm," dome-shaped, made up of small pieces of iron. From this primitive form arose the Norman helmet of about 1000. This was merely a Spangenhelm made up of fewer, larger pieces, and with an innovation in the form of a projecting flange or nasal guard. The next stage in development produced a domed casque in a single piece with a reduced nasal guard.

Another stage evolved a tight-fitting skull-cap or primitive basinet. It was this

¹The history of the helmet in times earlier than this will be summarized in a separate label.

head-piece which was sometimes inclosed in a second helmet which fitted loosely over the head like a great inverted pot, the socalled heaume, which was usually carried at the saddle-bow and laced in place over the helmeted head only when the knight went into the mêlée. This supplementary type, often pictured in documents dating just before and just after the year 1300, appears to have been difficult to fix in its right position; if it received a heavy blow, it ran the risk of becoming displaced and was thereupon worse than useless, for it blindfolded the wearer, since its eve-slit was no longer opposite the eve. The weak feature of this head-piece was evidently the complicated way in which it was laced in place. Such a helmet we should call in biological jargon "highly specialized" (like a beast whose teeth are suited only for a special kind of food), and like a highly specialized animal could not long survive (for when the special kind of food gave out, the animal which could live only on that food perished). Hence we are not surprised to find that the period of usefulness of this heaume was brief, and that a new form of defence took its place.

This new fashion developed in the fourteenth century from a close-fitting skullcap or basinet, and a series of forms of basinets dating between 1300 and 1400 indicates a tendency for the head-piece to become taller and revert somewhat to the fashion of the ancient Spangenhelm. It was, however, an improvement upon the older type, inasmuch as it had adjustments for a hood or cape of chain mail which protected the chin, neck, and upper shoulders. It had also a face-guard, formed as a mask of iron which in early basinets swung down in place from the forehead but in later ones was hinged at the side. In Northern Italy the best type of basinet next replaced or copied the camail in the downgrowth of the sides of the basinet. This result, however, was accomplished only as a tour de force on the part of the late fourteenthcentury armorer—in fact, today, after the accumulated experience of over four hundred years in metal-working, it would be difficult to find an artist who could copy such a head-piece in a single piece of steel.



This basinet, known as the Aquilegian, was easily the culminating point in this series of early casques. On another line, however, arose a curious blunt-nosed basinet, heavily formed, having wide neck plates and a separately modeled chin. This arose about 1400 and was in many respects so perfect a closed helmet that we wonder why it was not made the point of divergence for types which appeared only at a much later In a word, it must have had in its period. structure some fundamental defect which prevented the armorer of the day from continuing its use. Certainly it was heavy and unwieldy. It was set down over the head like a heaume and was a cage for the wearer's head rather than a helmet: it could not be satisfactorily fastened in position, its chin was immobile, and altogether it was too highly specialized long to survive.

It was again a simpler form, as explained in the diagram, which became the point of divergence for various forms of helmets. Thus the basinet which developed a neck guard formed of a separate piece seems to be the "ancestor" of a new line of heaumes, or heavy tilting head-pieces, which do not appear to be related to the ones which, as we noted, occurred about the year 1300. The later heaumes are shown in the diagram in four examples in which, decade after decade, the head-piece increased in size and was more and more perfectly adapted to its use. Thus this heaume came to be locked down to the breastplate and back-plate and could be used only when the wearer held his head in a certain position, as in bending forward in the saddle when tilting. Such a head-piece led to no further evolution.

It was a simpler form which once again must be sought as the "progenitor" of various types. Thus it was a small head-piece having a short neck guard not in a separate piece but arising from the timbre, which seems to have been the basal form of all the later kinds of head-pieces. In one line it gave rise to the *chapels de fer*, in another line to the *barbutes*, in still another to the *salades*, and, finally, most important, to the closed helmet which first appeared toward the middle of the fifteenth century.

The origin of the chapel-de-fer is clearly

shown in the diagram. The latest of its type was a broad-brimmed hat of steel which arose from a simpler form with a sloping brim, which in turn arose from a wide, longish head-piece, i. e., one still having radial symmetry. The earliest chapel was depressed laterally and inclosed the sides of the head.

An equally interesting evolutionary series were the salades which developed extreme bilateral symmetry. At first they were produced backward so as to cover the nape of the neck. Later they developed in the brow region a slot through which the wearer could see. In the next stage there appeared a separate plate which rotated in such a way as to form a visor. The latest forms of this head-piece had extremely long neck guards which were flexible and formed of separate pieces, so that the wearer could bend his head far backward.

Equally clear is the origin of barbutes. These were hood-like head-pieces developed from a single piece of metal, which came to inclose the face more and more perfectly, and even developed a nose guard. This last type of head-piece is interesting, since it resembles the most perfect helmet known in classical antiquity, the "Corinthian casque" of the Greeks. While it is possible that the most complete barbute may have arisen during the Renaissance as a result of the widespread study of classical antiquities, it is more probable, I think, that it had an entirely independent origin—a case of "parallelism," as the zoölogist says, when he contrasts the wing of the bat and the wing of the bird, i. e., things similar in form and use but different in mode of origin.

It will be seen that all of these head-pieces—chapels, salades, and barbutes—were faulty in so far as they have no well-attached chin defenses. As hat-shaped head-pieces they could not be held securely on the head. These objections were first overcome in the armet, as shown in the diagram. There was first developed (about 1450) the armet à rondelle—in many ways the most beautiful helmet which the art of the armorer ever devised. It is unlike later armets and it is even doubtful whether it belongs at all in the main line of their

"descent." The armet à rondelle was really a barbute in which the cheek-pieces grew so wide that for convenience they became hinged to the top of the helmet, and closed below over a peg on the point of the chin. The visor, too, was archaic: it was the visor of a basinet but much reduced in size, still retaining, however, the basinet's curious hinge-like arrangement at the side. The neck region of this armet was protected by a camail, somewhat as in the earlier basinet, and it had at its back a disk, or rondelle, attached like a mushroom to a short, stout stalk, which appears to have been used first as a protector for the fastening of the neck-gear of chain-mail and later was retained as an ornament. It is doubtful, I say, whether this kind of armet gave rise to the later armets as shown in the present diagram. It had already become too highly "specialized" in its attachment to the cape of chain-mail, as well as in its rondelle and its enormous cheek-flaps.

The origin of the later armets can, therefore, I believe, be better understood in the diagram by taking as a starting-point the curious head-piece shown as arising from the visored salades. This primitive armet was a salade which was deep in shape and closely modeled to the head. Its visor extended below the chin and was provided with breathing apertures which suggest crudely the lips of the wearer. The neck region had already been made flexible by the appearance of laminae such as one finds in late forms of salades. If we start with this form, the development of the various types of head-pieces of the sixteenth and seventeenth centuries can now easily be traced. From it arose a long series of closed helmets, burganets, morions, cabassets, iron hats, and, as the latest and most degenerate form of the helmet, a small metal hat-lining.

Studying some of these helmets in detail, we find that about the year 1500 splendid armets, or helmets, were developed: they were more perfect "functionally" than even the armet-à-rondelle: thus, their crown or timbre was complete, modeled closely to the entire cranium; they required no straps or laces to keep them in place; they needed no neck defense of chain

mail; and they were provided with both chin-piece and visor which not only "fitted," but were more conveniently articulated, for both rotated from the same pivot. Clearly, therefore, this casque was easier to fix in place or to take off. At this time, too, fluted surfaces appeared in the metal to make the bowl of the head-piece relatively lighter and stronger. Some of these helmets even had close-fitting necks which were so accurately moulded around the border of the neck-armor that they allowed the head-piece to rotate in a "track." The next stage in the development of the armet produced separate visors, that is to say, the upper half of the earlier visor became a separate piece but rotated always on the same pivot. Then arose various forms of crests and neck-gear, as shown in the figure.

On the one hand, burganets arose from armets developing a visor-like brim, like the peak of a cap. In late burganets (siege-pieces) this peak, or umbril, disappears: in earlier burganets which were designed for light use the chin region or bevor disappears, or is replaced by a demountable chin-guard (buffe). In these light burganets formal ear-tabs come to replace the heavier defenses of the side of the head. Also neck-guards, which were short in earlier types, became lengthened out, laminated, and flaring as in the Cromwellian "lobster tail" burganets. And in the last member of the series the neck-guard either became rudimentary, as in the curious spider helmet, or else was flattened out in a single heavy plate. Morions were clearly the derivatives of burganets, and cabassets were shortened-up morions in which the crescentic brow-and-neck guard was reduced to a short, flat brim. In this head-piece the crest or comb disappeared. after passing through a series of decadent forms. The latest effective helmets were pikemen's pots and iron hats; from them descended, in a degenerate line, iron hatlinings. In these the earliest were solid, shaped to the crown of a felt hat. They were next made lighter, sometimes by having holes cut in them, and later they became lighter still by being built up, basket fashion, of interlaced iron strips. In the last

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form of all they were formed as a series of bands so articulated that, when not in use, they could be folded up into a single piece or block and thrust into the owner's pocket.



BURGANET ATTRIBUTED TO HENRY II, ABOUT 1550 DE DINO COLLECTION

XLV

HISTORICAL FAN, WAR-HAT, AND GUN FROM JAPAN

AFCADIO HEARN has made us familiar with Matsue, a remote Japanese town in the province of Izumo lying against Korea; for near this town (at Kizuki) lived the man-who-was-a-god, directly descended from the Shinto deity who some twentyfive centuries ago inhabited this spot when the ancestor of the present emperor descended upon earth and made his habitation in Japan. On this occasion the Shinto god of Matsue did not hesitate to admit an invading emperor and give him fair words and favor. In fact, it was on account of this "tactful recognition" that he was patronized by the emperor and appointed regent in that part of the earth. Since then, from father to son, his descendants have been the spiritual rulers of Matsue, and as pontiffs their home has ever been in the temple.

When I went to Matsue in 1905 I had a particular reason to visit the temple, for in its treasury was a suit of precious armor -donated, ex voto, by the shogun Ashikaga Takauji-and this I wished to examine minutely and to photograph. Hence it was clear that I should meet and ask the permission of the arch-custodian, the manwho-was-a-god. This I found I could readily do since Baron Senké, who was then the head of the family, was a friend of my friend Dean Kakichi Mitsukuri of the Science College of Tokyo. So, thanks to a cordial letter, I had the honor of being given a personal interview. I shall always remember the ancient shrine where by the side of Danshaku Senké I worshiped in Japanese fashion and had my hands purified in holy water before I was permitted to examine the wonderful fourteenth-century All of this, I confess, seems wide of the present mark. It so happened, however, that through the local schoolmaster, a young man who stood nearby and acted as

Baron Senké's interpreter, I was later given the opportunity to see interesting objects which were not the property of the temple—and some of these I acquired.

Among them was an historical gun, together with a fan and a war-hat¹ which had belonged in a branch of the Tokugawa family which ruled Matsue in the seventeenth century. These objects are perhaps of sufficient interest from an artistic viewpoint to merit the present note.

The war-hat is simple in form (fig. 2), well preserved, covered with black lacquer of the best quality, and bearing in gold the arms of the Tokugawa family. Its inner side is decorated with gold lacquer, and on its primitive lining is an old inscription, in rather unclerkly hand, stating that it belonged to "Daimyo of Matsue, Un-in Tai-shu, Matsudaira Dewâ-no-Kami Naomasa, Major General Sho 4 rank," and giving also a date, "third month, Kwanyé 15, the year of the Tiger [=1638]" (fig. 3).

The war fan, which was used as a commander's truncheon, is richly lacquered, its borders of iron damaskeened in silver (fig. 4). Its handle bears the same name. "Naomasa"; and on its sides, written with lacquer in red characters on a lighter ground of red, are poetical maxims, suited to a commander's fan. On the obverse appears: "My power is unseen like the mystery of the universe, and my action is as the bolt from heaven"; on the reverse, "In repose I am as stable as a mountain and still as the deep forest, yet in time of action I sear like living flame." The Chinese characters are here well written, suggesting the love for writing, as an art in itself, which for over two thousand years people of the East have cherished, where a beautiful inscription is given equal rank with a beautiful painting.

¹These were given to the Metropolitan Museum in 1914.

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Who was the daimyo Naomasa here mentioned? A review of the history of the Tokugawa family shows that he was a grandson of Iyeyasu, famous head of a famous family which for two and a half centuries ruled Japan with a feudal system more elaborate and successful than the world had ever known. Naomasa (1600–1666) was the fourth child of Hideyasu, who was the elder brother of the second

family treasures from the time when they were given to an ancestor by Naomasa¹ as a personal keepsake.

The third object is the most important. It is a gun (fig. 1) which dates from the late sixteenth century and, it is stated, was a family treasure of the same Daimyo of Matsue: its inscription reads Chosen; Horio Taito: Kampaku Taiko, Hairio: Un-in Joshu. This may be translated:

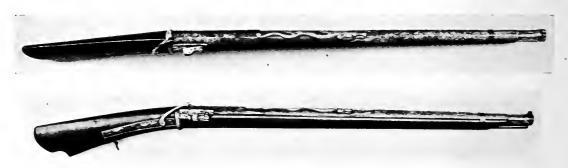


FIG. 1. GUN PRESENTED BY HIDEYOSHI TO HORIO TAITO (1592-98)



FIG. 2. CEREMONIAL HAT (JINGASA)
OF NAOMASA, DAIMYO OF MATSUE

Shogun, Hidétada; he became the ruler of the province of Izumo, a fairly rich fief (revenue reckoned as 186,000 koku, or bales-of-rice, a koku weighing 350 pounds), in 1638; and he was the ancestor of the Matsudeira branch of the family which became prominent in middle and later Tokugawa times. The present hat and fan were said to have been preserved in a samurai household in or near Matsue as

¹In his Glimpses of Unfamiliar Japan, Lafcadio Hearn has given several interesting references to Naomasa (especially in Vol. II, pp. 621-624): he refers to him as the patron saint of Rakusan temple, describes the procession when his miya (memorial effigy) was carried from the temple to the castle of Matsue, and

[From] Korea, [this gun to] Horio Taito, a gift from Kampaku Taiko, [to] the Daimyo of Matsue. Our, gun, therefore, concerns the famous Kampaku Taiko, Hideyoshi, the "Japanese Napoleon" who invaded Korea in 1592.

Was it, then, a relic of the Korean campaign, or was it among the presents given by Taiko to his victorious general on his return from the front? We know that

tells of Naomasa's consternation when he invaded the Holy of holies at Kizuki and saw the relic turn bodily into the writhing coils of a huge dragon!

²The writer's friend in Kyoto, Mr. K. Makino, in a letter just received, states that the use of the character Ko in Taiko—which signifies princely

Horio Taito was one of the best officers of Hideyoshi and high in his favor: like the latter he was parvenu: he appeared in his service in 1573 when a youth of sixteen and was soon given a very small holding (150 koku) at Nagahama: then he saw the fall of Nobunaga (Hideyoshi's feudal chief) and the stormy rise of his master. And his fortunes rose with Taiko's: he had in time holdings in Harima (1,500 koku), Tamba (3,500), Takahama (20,000), and Sawayama castle (40,000). The last was an important advancement; it bore with it the title Taito and the rank Ju 5 of second rank-which may tell little to you or to me, but which meant much to the feudal mind of Japan. Next, he was given the castle of Hamamatsu (which increased his revenue by half). Then came the extraordinary Korean campaign, which inspired the Japanese and unified them. In 1598, the year Hideyoshi died, Horio Taito was among the highest officials in Japan: he was one of the three second secretaries of his master and was the steward of practically all of Hideyoshi's provinces. It is clear that he was highly esteemed in the empire; for Iyeyasu when he became shogun increased his income and gave him at once the province Yechizen and soon (1599) the rich fief of Izumo (240,000 koku) and the Oki islands. Now it was that he retired to Matsue and built (1603) the great castle there, which was called Un-in-jo (un = Izumi, in = Oki-islands, jo = castle),from which sprang his title Un-in-jo-shu (shu meaning governor, or lord).

The gun itself is interesting as an arm and differs in several regards from any Japanese gun I have examined. Its lock is unlike those of later design. Its barrel appears to be of foreign make, probably an early importation from Portugal: a reason for this appears in the character of the little loops which it bears along its under side; for these were used for pinning the barrel to a

birth, while Hideyoshi was notoriously plebeian, and should have been quite satisfied with the ideograph Go—was part and parcel of Hideyoshi's ambitious plans. He was to become king of Korea and China combined, leaving Japan in the hands of lyeyasu: hence it was that he affected the dress of the Ming emperors and caused his subjects to call him Kampaku Taiko. European gun-stock—the present Japanese stock² holding the barrel in position by means of external loops of metal. Another feature which suggests a foreign origin for the barrel is the fact that part of the ornamentation, that showing a wave pattern, is applied, instead of having been chiseled directly on the barrel—the barrel was already too thin to warrant this treatment, even when made of the strong namban tetsǔ (foreign iron) which already was highly prized in Japan. I may add that the mountings of the gun are richly gilded à mercure.

In summing up the findings upon the foregoing objects, one is inclined, after the

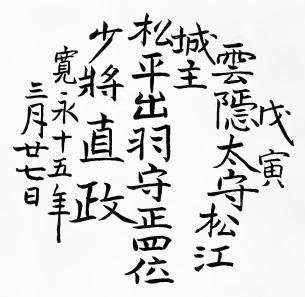


FIG. 3. INSCRIPTION ON LINING OF WAR-HAT

fashion of a war-worn collector, to ask the question, "Can these things be authentic?" Evidently historical attributions for art objects are always to be accepted with reserve. And especially is this true in Japan where there have been collectors for centuries and where hero worship has ever been intense. In the above instances, however, it seems clear that both the objects and the inscriptions are of the period. In the case of the hat and the fan their

¹Otherwise Horio Yoshiharu, or Tatewaki. (Note kindly given by Mr. Kojiro Tomita.)

²In later Japanese guns, on the other hand, pins are commonly used for attaching the stock to the barrel.

exquisite quality leads us to believe that their owner was a personage of high distinction. As for the gun, it is not only of the best workmanship, but it was considered of such value that it was exhibited on some occasion and for some purpose, for I discover as I write this that it bears

Kojiro Tomita of the Department of Japanese Art in the Boston Museum has examined the objects critically and not only read the inscriptions given above but very kindly translated eight archaic ideographs which appear on the barrel of the gun. They signify: "Longevity (be) compared



FIG. 4. WAR FAN OF NAOMASA, DAIMYO OF MATSUE

a catalogue number and the official mark of a prefecture. These are stamped deeply in very small characters, rust filled, on the side of the barrel near the stock.

I should finally note that the inscriptions given herewith were carefully translated by my friend, Mr. Hashime Murayama, to whom, too, my thanks are due for his detailed references to Japanese documents.

Since the foregoing was in proof, Mr.

(with the) Southern Mountain: Wealth (be) likened (to the) Eastern Sea." This, it appears, is a classical Chinese formula of congratulations. It means, "May you live long and prosper!" The mountain, Mr. Tomita adds, is (Chung) Nan Shan, near Ch'angan, in Shensi. Mr. K. Makino notes interestingly that the Eastern Sea is named in this formula of well-wishing, since it was the home of the god of wealth.

XLVI

ARMOR OF DOM PEDRO II, KING OF PORTUGAL







FIG. I. ORNAMENTAL RIVET-HEADS

RMOR was largely discarded by the year 1650: it had become so heavy that even horsemen began to take their chances of being injured rather than "grunt and sweat under a weary life." Then, too, even the heaviest armor did not give complete protection, for guns and gunpowder had so developed that death reaped at long range. By the reign of Louis XIV a suit of armor was usually composed of but a few heavy pieces, such as casque, corselet, bridle-gauntlet, with occasional reinforcing plates of great strength, which were worn only when needed, as when one showed himself above a rampart, or thrust his head and shoulders above a siege-trench—very much as a soldier does today in the Great War.

In those times armor became virtually restricted to the use of officers, especially those of rank. But in spite of the high position of its wearer the armor was apt to be undecorated, poor in quality, and uninteresting in lines. In the rare cases when it was decorated its enrichment was coarse and showy, executed rather by workmen than by artist-armorers, whose race was well-nigh extinct. Exceptional, therefore, are the pieces of armor, dating about the year 1690, which have recently been acquired by the Museum, figs. 2 and 8; for they belong with the best of their class, richly wrought and ornamented to an extraordinary degree. They comprise head-piece (a lobster-tail burganet), front and back plates, bridle gauntlet, and a reinforcing plate for the breast. In their original condition they were decorated with bands blued or gilded, and these were elaborately ornamented in punched work, showing panoplies, medallions, and foliation.

The provenance of the armor is shown in its decoration; for on the head-piece there appears the crown of Portugal (fig. 3),



FIG. 2. BREASTPLATE OF DOM PEDRO II,
ABOUT 1600

on the left breast is the Grand Commander's cross of the military order of Christ (fig. 4), and at various points, e. g. on forehead, breast, and gauntlet, there are the interlaced letters P. R. which signify Pedro (II) Rex (King of Portugal, b. 1648 d. 1706) (figs. 3 and 5). Add to these indices of ownership that the objects came from Portugal, and that the office of Grand Master of the military order of Christ was, since Pope Julius III's edict of 1551, reserved for sovereigns of Portugal, and it is fair to conclude that the objects belonged to Dom Pedro.

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It is greatly to be regretted that the armorispoorly preserved. It is heavily rus-



FIG. 3. CROWN OF FOR- in a church above TUGAL ON HELMET a tomb. Curious-

ted and its ornamentation is in places quite obliterated. The pieces have evidently been neglected for a long time, for their rusty surface is patinated as if from having hung in a church above a tomb. Curiously enough time

has spared certain parts of the armor. Various bits of the velvet linings are present and in relatively good order, includ-

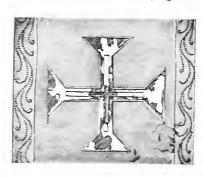


FIG. 4. CROSS ON BREASTPLATE

ing the silk-covered tab of the bridle gauntlet by which this was buttoned to the sleeve and thus kept in place. The quilted silk lining of the burganet's peak is also

preserved, and in good condition. although its scalloped border is lost. The breastplate still shows in large part its original surface; for this was covered with the



FIG. 5. ROYAL INITIALS ON BREASTPLATE

reinforcing plastron, and when the latter was removed, the goldbands of the breast-plate stood out with great splendor. Never-

theless, the points which best show the original nature of the ornament are on the plates of the gauntlet which cover the back of the hand. These remained overlapped when the hand hung

in its natural position; but when they are opened, as when the knuckles of the gauntlet are bent, we see a well-preserved border, within this a narrower blued band, and next, the plate itself, which is so brightly burnished that it appears to be made of



FIG. 6. PLUME-HOLDER

silver. The gilding of the armor suggests its decadent period: it was showy and crude; for the gold, instead of being attached to the underlying metal by fire gilding (i. e. deposited by heat from a mercury amalgam) or by careful damaskeening, was merely laid on in sheets and hammered in place by punches. By this process the gold was poorly attached to



FIG. 7. FOLIATE ORNAMENTS

the steel, and when the latter rusted, the gold separated, peeling off from its matrix in strips.

We may add that all details of the present armor indicate its high provenance. The workmanship is of the most costly type. Thus, the plume carrier of the

NOTES ON ARMS AND ARMOR

casque (fig. 6) is beautifully executed à jour, and remarkable for its period. And of equal quality are the rivets, pegs, hook, and ornamental bands (figs. 1 and 7).

The weight of the armor (the pieces together weigh 43 pounds) shows it was used in siege operations. It may well have been

worn by Dom Pedro during his campaigns in the War of the Spanish Succession: we know that he appeared on the side of France in 1701, and that later (1703), under English influence, he changed sides and captured several Spanish towns for the Archduke Charles.



FIG. 8. HEAD-PIECE OF DOM PEDRO II
ABOUT 1690

XLVII

A LATE SEVENTEENTH-CENTURY ITALIAN SABRE

N the history of European arms every decade is apt to develop a recognizable style. This shows itself in the way objects are fashioned, their material, their form, their ornaments-characteristics which give the inquiring student many hints as to when, where, and how a certain piece came into being. us take as an example the style in arms which appeared toward the end of the seventeenth century. This expressed itself in perforated and chiseled steel, elaborate in design and detailed in execution. It showed itself in the mountings of guns and pistols, the trappings of armor, and the steel hilts of swords. In sword-hilts this fashion swept away the earlier one in which enrichment was carried out in ridged and beaded surfaces and in lozenges or medallions picked out in gold and silver damaskeen. It emphasized the taste that an object of steel should be enriched only in steel, that an artist should now use his hard medium as fluently as his predecessors had employed bronze or incrustations of softer metals, that the bright colors of silver, gold, and allovs of earlier workers should give place to the somber finish of steel in brown, brownish-blue, or black. One has only to examine the types of swords appearing in portraits of the period, English, French, German, and Italian, to see how widespread was this fashion. In a sense it was an affected fashion; for while discarded the earlier, complicated, basket-shaped sword-hilts for something simpler in lines, less conspicuous in size, and less striking in color, it was yet of greater luxury, for the sculptured steel was more costly even than many a hilt fashioned in precious metals.

A sword which illustrates this fashion has lately come into the possession of the Museum and may be described here briefly; for its type is by no means common, and our sword is a good one of its kind. It is a sabre, coutelas, or cutlass, dating about 1685, made in Reggio, a town included with the ancient duchy of Modena by a sword artist whose work is known in several of the great collections of Europe. Its blade, excellent in quality, is unusual in having a median groove passing along its side almost to its point, which is here double-edged as in similar arms known to The hilt is of steel richly sculptured, blued, and at one time parcel gilt, the last a condition especially rare in a sword of this kind. Its grip is of a form which occurred only for a short period: it merges with the pommel and becomes pear-shaped, ornamented with deep channeling and with an applied steel ornament in the form of an acanthus leaf: its base, developed in the fashion of a ferrule, pictures a crown. A knuckle-guard, or branche, is present and bears delicately chiseled foliation.

It is the guard itself, however, which particularly concerns us. This is developed only on one side and is broad, sub-circular, rounding over the hand. It is ornamented by perforation and elaborate chiseling; on its outer side it bears panoplies encircling a medallion on which is a horseman with holster pistol and sword, and the device "Unus non sufficit." On its inner side appears the bust of a personage of the period 1680-90 with full wig, lace neckgear, and armor. This is framed by a wreath of laurel and surmounted by a ducal crown. The crown, according to Litta's work (Famiglie celebri italiane, 1825, Milan), is that of the Duchy of Modena, and from an illustration there given the personage may well be Duke Francesco II (1660-1694), who, by the way, is remembered by English students as the brother-in-law of James II.

The present sword bears on the base of the guard the incised initials P. A. These evidently stand for Petrus Ancinus of Reggio, for this artist is known to have executed similar objects and to have signed them with his full name. He may well have made the sword at the order of his patron, either for the duke himself or for some member of the ducal household. We may be certain, at least, that only a personage of distinction would have carried so costly a sword. We know, furthermore, that Petrus Ancinus was already in the service of the dukes of Modena, for in 1661 he executed a sword bearing the blazon of the Este, and signed it in full. This is now preserved in the Artillery Museum in Paris (I. 230 of the catalogue of 1891), and is similar to the present sword but more elaborate in workmanship. In fact, our artist seems to have been so favorably known that he was patronized by some of the greatest princes of his day. Thus he prepared for one of the de' Medici the sword (1641) which is now in the museum in Florence (Catalogue of the Bargello, 1898, p. 28). There are also extant two examples of his work, quite similar in quality to the sabre-hilt, to which Mr. H. W. Harding recently called my attention. One of them is the sculptured lock of a harquebus, the other a trigger guard which probably belonged to the same lock. The lock, exhibited at the Burlington Fine Arts Club in 1900 and figured in its catalogue, is said to have come from the treasury of the Sultan at Constantinople: it bears the signature: Petrus Ancinus Regiensis. F. MDCXXXXIII. The trigger guard with similar inscription was sold in Paris in 1895 in the collection of M. Frédéric Spitzer.

Our sabre is interesting in the matter of its date, for it is probably one of the latest works of the master; for in the list noted above, Ancinus's period of activity ranged between 1641 and 1661, while the present sabre hardly antedates 1680.

The early provenance of our arm is unknown. It was obtained from Mr. Harding, who in turn had it from the well-known collector, Baron de Cosson.

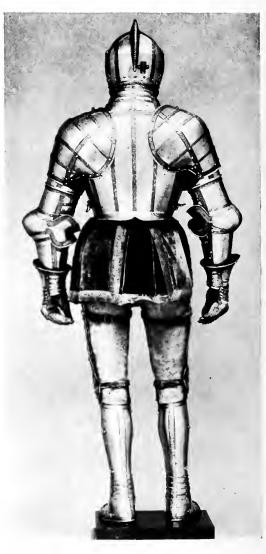




GUARD OF SABRE BEARING THE INITIALS OF PETRUS ANCINUS, ITALIAN, ABOUT 1685

XLVIII THE ARMOR OF SIR JAMES SCUDAMORE





ARMOR OF SIR JAMES SCUDAMORE

HE two suits of armor obtained in 1911 from the Earl of Chester-field have finally been placed in their cases. The work of repairing and restoring them and of removing deep-seated rust from all their parts consumed far more time than was at first expected. Then, too, the task was interrupted by the installation of the Riggs Collection in the new galleries.

These harnesses, described in the BULLETIN of June, 1913, are known to have belonged to a well-known personage of Queen Elizabeth's court, Sir James Scudamore, who was, by the way, the Sir Scudamore of Spenser's Faerie Queene. In the earlier article we noted that the harnesses were discovered in the attic of Holme Lacy, the ancient manor-house of the Scudamore family, where they had

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remained ever since the time of Elizabeth, and where, unhappily, they had been placed in a chest near an attic window where storms beat in and rust corrupted. There is no question, of course, that the armor actually belonged to Sir James; for

unfortunately missing. Thus, the gauntlets had been lost and in one suit the headpiece was absent and in the other the corselet, together with several less essential pieces.

Hence there arose the delicate question





SECOND HARNESS OF SIR JAMES SCUDAMORE

the portrait of this personage exists showing him in one of the suits now in our gallery and the second suit is identified by means of a sixteenth-century drawing in color inscribed with his name, which formed one of the plates in the well-known Armorer's Album now in South Kensington Museum.

In the earlier Bulletin it was explained that certain elements of both suits were

as to what should be done in the way of restoration. The armor was to be cleaned and repaired, that was clear; but should the suits be exhibited in their defective condition, without head in the one suit, and corselet in the other? Or should the missing pieces be restored in strict accordance with the contemporary drawings we had of them? One expert, it must be admitted, advised leaving the suits precisely

THE METROPOLITAN MUSEUM OF ART

as they were and exhibiting them in a vitrine as detached objects, rust and all! But every other expert I consulted in and out of museums cordially recommended that the missing pieces be restored. In the first place, the lost parts were accurately known and in the second place, the harnesses could be far better appreciated and understood if they were shown to visitors in as nearly as possible their original condition—certainly not as they appeared after the neglect and mishaps of centuries. The modern elements could, of course, be so made that they would not destroy the ensemble of the suits; but, ever to distinguish them from the genuine pieces, they should bear deeply etched in their surface the signature of their maker and the date. And the label should state clearly what elements are new.

The original parts of the armor were, of course, treated with the greatest considera-

tion. Both their outer and inner surfaces were slowly freed from rust, and bright surfaces were restored as nearly as possible to their primitive condition, but the etched areas were kept absolutely intact. It goes without saying that the ancient gilding remains precisely as it "came out," when the rust was removed. Happily much of the old gilding is still present: it was laid on heavily by the artist who enriched the armor, and it came into full view only after layers of ancient rust were softened and brushed away.

The entire work of restoration was carried on within the Museum, all technical work executed with great skill by Daniel Tachaux, the Museum's master-armorer, whose results, it will be seen, bear comparison with those of master Jacobe, or Jacoby, who executed the original armor in the royal workshops of Greenwich about 1585.

XLIX

MR. MORGAN'S MILANESE CASQUE

IECES of armor decorated by embossing were ever rare. In general they date from the middle or later part of the sixteenth century—which were decades of great luxury—

and represent the supreme effort of the armorer to enrich his casques, shields, and plastrons in the most beautiful manner. They were objets de grand prince, for so difficult and time-consuming was the art of making them that few indeed could afford to possess them. An important specimen, made even under favorable con-

ditions, might claim the time of an artist not for months merely but for years. There are at the present time few pieces of armor of this class outside the cases of museums. Of richly embossed helmets there are on this side of the Atlantic but two specimens, so far as I know, not on public view, the third having recently been lent to the Metropolitan Museum through the kindness of Mr. J. Pierpont Morgan.

This casque formed part of the collection of Mr. Morgan's father and long stood in his library on a case opposite his favorite chair. It had come into his hands from the Duc de Luynes, who had held it among his most treasured possessions.

It is an object of extraordinary beauty,

and attracts general attention (figs. 1, 2, 3, and 4). Modeled in graceful lines, it suggests somewhat a Periklean casque, moulded close to the head at the back and sides, and furnished with a longish frontal



FIG. I. CASQUE BY PHILIP DE NEGROLI, 1543

peak. Its embossed decoration covers it lavishly: on its sides are leaves and coiling tendrils and a central flower from which a cupid half emerges; its comb is fashioned as a supine female figure which arises from acanthus leaves on the back of the helmet and extends head downward on the frontal. In the hands are caught tresses

of a gorgon's head, which forms a large frontal ornament. So bold is this embossed work and so admirable its quality and sharpness that an observer can hardly realize that the work has been accomplished in steel. It suggests rather a casque of dark-colored bronze, which had simply been cast from a model fashioned in soft wax-not embossed, after many months of labor, in metal—an illusion made more striking by the beautiful dark patine which the steel has acquired in the course of centuries. Technically, the casque is a "renaissance burganet": its cheek-pieces are lacking, but it still retains its separate brow-plate bearing an inscription. This reads PHILIPP'. NEGROLU. FECIT. MDXXXXIII.

A few notes as to the artist who made it. Philip de Negroli, born about 1500, died about 1561, was unquestionably the Michelangelo of armorers. His fame was widespread in the great courts of Europe during the second half of the sixteenth century. In an early work (1595), La Nobilita di Milano, he is referred to "as meriting immortal praise as the foremost embosser (intagliatore) of steel, both in high and low relief, in which he excelled his famous brothers. This virtuous spirit caused the King of France and the Emperor Charles V to be amazed (stupire) at his truly marvelous work in armor, head-pieces, and miraculous shields." So far as we know them, his works are seven. He prepared for the Duke of Urbino (1) a head-piece embossed in steel as a portrait of this personage. This is now preserved in the Imperial Collection in Vienna (No. 212): its inscription reads: PHILIPPI NIGROLI JAC. F. MEDIOLANENSIS. OPUS. MDXXXII (=Jacobi Fili, his father Giacomo remaining until about 1539 the head of the Negroli workshops). In the following year Philip de Negroli appears to have begun to execute pieces for the Emperor Charles V, having been recommended to him by the Duke of Urbino. (2) He then made for the Emperor a similar casque, virtually a portrait in steel, which is now preserved in Madrid (D. 1). It bears the inscription: JAC. PHILIP-MEDIOLAN. PUS NEGROLUS. FACIEBAT. MDXXXIII. At the same time he prepared for the Emperor (3) the "Shield of the Lion" (D. 2), now also in Madrid. His next known work dates six years later: it is (4) the splendid suit of armor in Madrid (A 139), which bears a casque similar to the present one but not so richly embossed. In fashioning this suit Philip was aided by his brothers, as the inscription states. He then executed (5) a shield for the Emperor, bearing the famous "Gorgona-Medusa," now in Madrid (D. 64), which probably cost him over two years' labor, even with the assistance of his brothers. It was completed in 1541. Following this the artist prepared (6) the present bur-

¹ Among our authorities are included the notes given by MM. Gelli-Moretti and the Comte de Valencia de Don Juan.

ganet, which is the richest of all that are known, and which probably occupied most of his time during the years 1542 and 1543. Finally he executed in 1545 (7) the burganet of Charles V which shows Fame and Victory, its comb fashioned as a supine figure not unlike the one on the Morgan casque. This is dated and signed F. ET FRAT. DE NEGROLIS (Madrid, D. 30).

As to the original ownership of Mr. Morgan's casque. It was made within the years when Philip de Negroli was receiving commissions from the Emperor; and it is hardly to be supposed that he would have produced at the same time and for a lesser personage a casque more elaborate and costly. Certain it is that, from the year 1533, when he commenced to fill the orders of Charles V, all of his extant signed pieces, with the exception of Mr. Morgan's casque, remain as part of the imperial heritage. But if the casque belonged to this court, why have we no record of so important a piece? Why was it not figured in the late sixteenth-century catalogue of the collection, or mentioned in the archives of the Armeria? And if it did belong to the Emperor, how could such a specimen have been abstracted with impunity—even at a time when many inconspicuous pieces disappeared?

To whom, then, did the present casque belong? Clearly, to a personage of the very highest rank, and one who had the artistic taste to prize such a possession. May it not have been Francis I? He was certainly the rival of the Emperor in many ways: he was even his superior as a patron of artistic work, and he was certainly not his second as a lover of beautiful armor. We know, in point of fact, from the document of 1595 cited above, that he was much impressed with the work of Philip de Negroli, and we recall most interestingly that he was the ruling duke of Milan at the time when Negroli was preparing this casque (1543); for Francis's last struggle to retain Milan was between 1542 and 1544, when by the Peace of Crespy he lost his duchy to the Emperor. Add to this that while such a casque could not reasonably have found its way out of the Imperial Armory it may well have dis-



FIG. 2. CASQUE, FRONT VIEW



FIG. 3. CASQUE, SEEN FROM ABOVE FIG. 4. CASQUE, BACK VIEW



THE METROPOLITAN MUSEUM OF ART

appeared from the French king's possessions, like so many other important arms which were scattered during the Revolution. So far as we know, moreover, the present object was long preserved in France.¹ It would be by no means surprising, therefore, if a study of the French archives demonstrated that in 1543 Francis I paid Philip de Negroli many broad

French pieces for embossing a princely casque!

B. D.

¹ Among my papers I find a note (which I made in 1914 in Florence when visiting the Baron de Cosson) that the casque in question was brought to England in the early part of the nineteenth century and was sold in 1834 as lot No. 366 in the sale of Sir B. Brocas. Was it then purchased by a Duc de Luynes?

PHILIPP'NEC
ROLV-FECIT - M CXXXXIII

POLE-ARMS: THEIR KINDS AND THEIR DEVELOPMENT

◆HE visitor to the Riggs Collection gives his greatest interest to the armor, but next to this he examines attentively the pole-arms which cover the walls of the main gallery and are arranged in groups at the bases of the central columns. For these are stately arms, many of them richly decorated, bringing to mind the pomp and ceremony of ancient war. Particularly impressive is the series of these pole-arms shown: it includes over seven hundred carefully selected specimens, running a gamut of forms, some simple, some infinitely com-To understand their kinds, their periods, and their origin is, however, by no means an easy task for the layman. Hence, a descriptive label has recently been put in place which illustrates about eighty varieties of these pole-arms and aims not only to show their names but how they may best be classified. In this plan we have followed the descriptive label for helmets (see Bulletin, vol. X, pp. 173-177) and have attempted to map out the various "lines" of pole-arms somewhat in the fashion of a zoölogist who explains the development of horses, shells, or fishes. Thus, on page 137 it will be seen that our pole-arms are arranged in a genealogical tree, the oldest members of each kind appearing lowest in each tree, but that the horizontal lines across the label indicate not the zoölogist's or geologist's periods of time but merely advancing centuries. This arrangement, we may add, proves a useful one for our purpose: it shows at a glance when pole-arms occurred in greatest variety, and it naturally associates the

¹This discussion concerns European forms from the Middle Ages onward: it omits, however, certain lines of development, e.g. derivatives of hammers, clubs, and picks; nor does it refer to the pole-arms of the classical period or of the Orient. These have followed different lines of development.

various forms in different periods. if a visitor, glancing at the label, wishes to know what kind of pole-arms were seen during the reign of Queen Elizabeth, he will only glance across the label near and below the line marked 1600. If he seeks the arms carried in the time of Joan of Arc, he need only examine those arranged above the line 1400; during the last conquest of Constantinople, along a line below 1500; in the American Revolution, along a line near the top of the figure. Among the many pole-arms he will find forms so complicated and so distinct from one another that had he not the figure before him he could hardly understand that all of the fourscore varieties represented may be derived from but four ancestral types. Among these are to be recognized three agricultural implements, i. e., axe, reapinghook, and wide-bladed knife or scythe. The fourth ancestral form is the spear the only real war weapon among them. This state of affairs suggests interestingly that the people who used pole-arms in early times were mainly peasants or serfs who had been drafted into military service and who brought with them the tools of their trade.

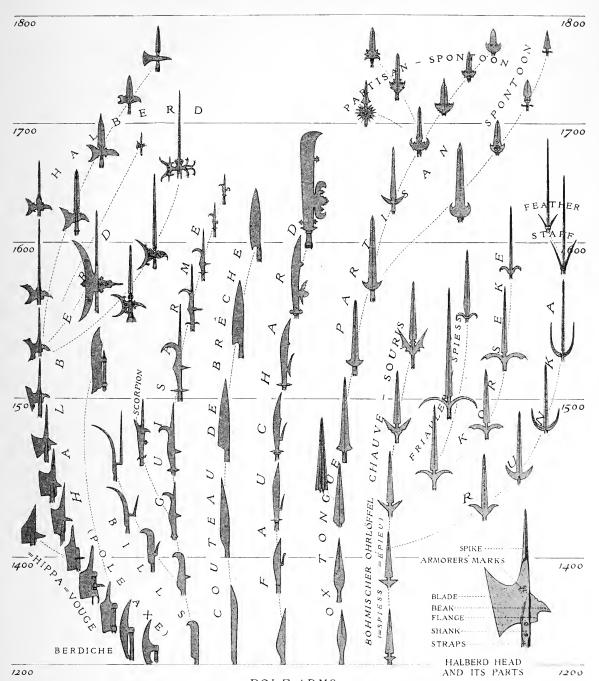
In explaining the present label, let us consider in order the suites of each of these four early forms.

THE AXE AS THE ANCESTOR OF THE HALBERD

Examination of the label shows that the many kinds of halberds lead back step by step to the broad-headed axe. This, by the way, was a rather short-shafted arm. It was succeeded by the *berdiche*, a pole-axe, longer in shaft, and having the narrow lower end of the tall blade rounded inward and braced against the shaft. At first this lower end of the blade merely touched the wooden shaft; it then became fastened to it; next it embraced the shaft, developing

for this purpose an encircling loop, like the main ring which forms the socket of the axe-head. This "generalized" type of pole-axe was common to all countries of Europe before the year 1400. It was essentially the butcher's heavy weapon with which he clave the head of an ox. It was this primitive halberd which the Swiss mountaineers used in their early struggle with Austria, and at Sempach and Morgarten it destroyed much splendid armor. But in battle it was found useful not only for chopping but for thrusting, hence the narrowing of the front end of its plate. In its next stage it developed a hook which was in the beginning separate from the axehead, and was merely wrapped around the shaft. But this fastening was imperfect and the beak was apt to swing from side to side like the tongue of a buckle. It was used evidently to drag a knight from his saddle, to trip a horse, or at need to grapple a wall up which the sturdy soldier clambered. It is instructive at this point to trace the fate of the halberd "beak." One thing is clear: the beak was found useful and it "came to stay." It needed first, however, to be stiffened, for as a loosely fastened hook it could not readily secure its object; hence, it was next clamped closely between the two loops by which the blade was attached to the shaft, and these now became wide so as to pinch the hook in position. Such an early halberd was called a hippa, or vouge, and its forms were especially common in the Alps, where, indeed, they persisted in use for several centuries. Thus, we find in out-of-the-way cantons that they continued to be made quite in the ancient style as late as the end of the seventeenth century—provincial forms which only an expert can distinguish from genuine early specimens, which, by the way, are rare and costly. In a word, the vouge was, par excellence, the halberd of the Swiss, recurring indeed even in distant countries where Swiss guards were employed, as in France or Italy. In Saxony, too, its form occurs in a characteristic arm of the state guard of Christian I and II and probably of Johann Georg.

A long line of Gothic halberds can next be traced from the simpler vouge. In these the blade was large, strongly cut, and square: its attachment to the shaft was mainly in the lower loop, or socket, which arose, as we noted above, not from the great socket of the ancestral axe, but from the new loop which the berdiche developed when its blade came to be supported below against the shaft. Thus, a new structure came into use, competed successfully with an older one, and in the end supplanted it, just as in the evolution of animals the ear-hole supplants a gill, by "change of function," or teeth supplant scales. In fact, in our Gothic halberd even the new socket, we note, did not give the final method of attaching the entire "iron" or head to the shaft. For, from the lower border of the new socket were developed outgrowths (shank and straps) by which the halberd-head could be nailed securely in place. As the result of this it could no longer slip from its handle, as sometimes happened in the more primitive vouges and berdiches. The beak in the Gothic halberd, we next see, became clearly a part of the blade, and below it there grew out a flange which had a special function in fencing or grappling: thus we note that it sometimes developed irregular notches by which the points of halberds or swords could be held securely. Interesting, too, is the development of the apical spike. We have seen that it was originally but the upper part of the flat blade of the vouge: it later elongated, thickened at the tip, and became quadrangular in section. Glancing at our label, we see that by the year 1500 all the typical parts of the halberd-head had come into being, and the halberd from now onward can no longer be classed as an axe. Its apex is a long, thin spike, suited for thrusting through or between plates of armor or for perforating chain-mail. beak became a wide, flat prong furnished with curious processes at its base, adapted for some particular function in fencing. But it was especially the blade which underwent changes; it was developed more for thrusting than for chopping, its upper end was narrow and pointed, and its lower end was so fashioned that it could pull down hostile arms, or if need be, aid in wallclimbing.



POLE ARMS
THE DEVELOPMENT OF THEIR COMMONER FORMS
DURING THE CENTURIES

BASHFORD DEAN DIR.

STANLES J ROWLAND DEL

The development of later halberds, sav between the years 1500 and 1600, is well seen in the examples shown on the left side of our diagram. The progressive changes include the lengthening of the apical spike and the reduction of the blade. The latter was now used as a double beak and was of so little use as an axe that its edge was not even sharpened. From halberds of this type are derived most of the later forms. In one line of these (at the right) the halberd-head became reduced in weight, and was probably valued far less as an arm than as a processional décor. This type developed "openwork" in the substance of blade and beak, and its corners sprouted out as irregular spines. The final member of this series, a Swedish form. dating from the middle of the seventeenth century, is so bizarre that one hardly understands at first how it could be a survivor of the simpler halberd of the preceding Comparison, however, shows century. that it arose from a halberd whose beak and blade were widely perforated. On the other hand, it is interesting to note that an opposite mode of evolution has been followed in a north Italian halberd which dates in the later part of the sixteenth century: here the beak and blade, instead of becoming lighter and fenestrated, grew broad and heavy. The blade, in fact, in this halberd is probably the largest of its kind—too large for actual service, but imposing in the hands of a ceremonial guard. In still another developmental line halberds degenerated in size. One of them, occurring about the year 1700, had a head so small that it could actually be covered by the palm of one's hand: as a weapon it was obviously of little use; it became merely a staff or cane of ceremony. In our label we note that the later halberds produced wide-bladed "spikes," reverting somewhat in this respect to the condition in the vouge, although we see at once that this wide apical development never arises from the blade of the halberd but is always the flattened outgrowth of the margins of the spike. This "flat-headed" type appeared about the year 1600. From this time onward its forms were numerous and they occurred always in lines of degeneration. Thus the entire halberd-head became reduced in size, the beak and blade lost their form and tended to coalesce, ornaments disappeared and out-rolled prongs were now represented only by holes in the body of the blade. In the latest phase of its development, about the time of the French Revolution, the halberd-head became a small, simplified pickaxe fastened below the head of the artilleryman's pike.

POLE-ARMS DERIVED FROM THE REAPING-HOOK

Many pole-arms trace their elaborate outline back to the simple curves of ancient reaping-hooks. Thus guisarmes, common in the courts of Italy and France during the Renaissance, are lineal survivors of the hook-shaped implement carried by early peasant soldiery. In this arm the curved blade was found to be especially dangerous to a mounted horseman; for, as he charged through a group of pikemen, it might either catch in the plates of his armor or maim his horse, hence the German name for this arm, Rosschinder. In earlier guisarmes the lateral beak and a short apex arose directly out of the flat blade, and there were as yet no prongs at its base. The great period of this arm was early in the sixteenth century, when it attained maximum size: its spike was quadrangular in section and its hook long and sharp, quite capable of amputating the hoof of a running horse. In the later part of the sixteenth century the guisarme was reduced in size. its basal lappets degenerated, its shank narrowed into a stalk-shaped ferrule, and its hook became heavy and proportionately small. The last of these pole-arms were sadly degenerate; they were very small in size, their beak became either an ornament or a small hook by which it could conveniently be hung on a peg. Guisarmes of latest type were known only in Italy where they became the ceremonial stayes of majordomos or suisses.

We might note here an eccentric form of the guisarme, the "scorpion," a form occurring for a short period and only, so far as I know, in northern Italy. It was largely guisarme, partly halberd, and partly fauchard.

We should finally include in our derivatives of the reaping-hook the bill, or brownbill, which was early developed in England; for it was the national pole-arm and ranked with the longbow in popular favor. In fact, "bows and bills" was a common gatheringcry of English soldiers during the fourteenth and fifteenth centuries. We note in our diagram that the earliest bill was little more than a shafted reaping-hook. It then developed a longer blade with a more decided hook and a longer beak which bent forward from an elbow. This was used to catch a blade in "fencing." In its next stage the bill had a long, wide, and sickle-shaped blade with a more pronounced beak for blade-catching and for thrusting. Finally, toward the end of the fifteenth century there arose a bill so highly specialized that one hardly ventures at first sight to associate it with its earliest form. Its blade was very long and very narrow, shaped like a keen, incurved surgical knife, and its beak was produced straight forward, its tip suggesting a bodkin twenty inches in length. The whole arm seems impossibly fragile, especially when we recall that a knight at that time was wearing the best of plate-armor. So hard was its metal and so perfectly were its plates fitted to the body of the wearer that he became well-nigh invulnerable. But this was the very reason, it appears, that a highly specialized pole-arm was prepared, not to break his armor, but to penetrate it none the less. Hence the blade was slender, so that it could be slipped between joints of armor, as at the elbow, knee, or shoulder. And the long, polished spike was designed to perforate chain-mail of "proof." beak, shaped like a delicate bodkin, would have to break only a single link of mail in order to inflict a dangerous wound.

POLE-ARMS DERIVED FROM THE SCYTHE OR SIMILAR KNIFE-SHAPED BLADE

The couteau de brêche was undoubtedly the direct descendant of the military scythe. It was in fact scarcely more than a scythe-blade mounted on a shaft, and as an arm it changed but little during the fourteenth, fifteenth, and sixteenth centuries. On the other hand, the fauchard,

derived from a smaller arm, underwent numerous changes. Thus, the early fauchard developed a blade-catching beak very much as did the brownbill. And later, like the guisarme, it gave rise to basal prongs. Later still it developed two structures, an ornamental outgrowth on the back of its blade, and a prong at the hinder end of its blade-catcher. These new elements deserve especial notice, for they in turn became centers of developmental changes. Thus they increased in length, in width, and in ornament, until, during the seventeenth century, thev formed the distinguishing marks of the fauchard of the doge's guard. This arm, it may be mentioned, grew to be of great size-it was, indeed, probably the largest pole-arm in the entire series. It was certainly too large to be used, and it was almost too heavy to be carried, in spite of the fact that its blade is believed to have been cut out of "rolled" sheet-steel instead of being made of carefully hammered metal.

It is probable that the fauchard of Europe appeared also in the Orient, whither it may have been carried by early traders. A similar arm is there seen in use even today; e. g., carried by ceremonial guards in Chinese courts of justice.

DERIVATIVES OF THE SPEAR

There are many kinds of pole-arms descended from the ancient spear. In the first of these the spear-blade expanded into a formidable ox-tongue whose blade was over two feet in length. From a form similar to this but with slight basal lobes arose the typical partisans of the late sixteenth and seventeenth centuries. From these again arose the many forms of spontoons which were carried by lower grades of officers from the time of the wars in Flanders in the seventeenth century down to the American Revolution and Waterloo. In fact, I learn from my friend, Colonel William C. Sanger, that every military officer of the State of New York is supposed to have in his possession a spontoon; for the old law, it appears, has never been repealed. The spontoon, we may add, underwent a series of interesting degenerations. The latest spontoons are

small, short, and wide, and the ornamental structures of earlier days may hardly be recognized. It may be mentioned that some of their early forms evolved elaborately decorated bases: in one of them there appears a sunburst, which calls to mind the device of Louis XIV, but which seems to have been used in Savov and elsewhere.

The second line of evolution in spears took its beginnings in the ancient hunting pike, or 'pieu, in which a pair of lappets was present at the base of the blade. These lappets originally served to keep a boar or bear from "running up" the spear when wounded. When the discovery was made. however, that the lateral lappets or prongs could inflict dangerous wounds, they soon underwent an interesting evolution on their own account. From such a hunting arm four well-marked kinds of later pole-arms came to be developed. The first of these was the trident-shaped runka in which the basal prongs were crescentic in early forms and narrow in late ones, long and slender like the tines of a fork. The extreme development of the runka in the late sixteenth and early seventeenth century was the feather staff, which appears typically in northern Italy; in this arm the tines and the huge median spike could be folded together and dropped into a hollow handle which served as a walking staff: they could be swung out again for service when a spring was touched—another example of high specialization. Korsekes and Friaule Spiesse are kindred pole-arms developed from the hunting spear. In the korseke each lateral prong developed a tiny pointed terminal and close below it a short, sharp, cutting blade, structures whose use was evidently definite but at present unknown. In the Friauler spiess lateral prongs were evolved which rounded downward and which served in pulling down hostile pikes so that cavalry could charge over them. In the heyday of these spiesse the lateral prongs were enormous in spread and might well have drawn together quite a sheaf of hostile pikes: in their latest stage, as we might expect, the hooks on either side became rudimentary, and were forged separately from the main blade. The final derivative of the lobate spear was the

chauve-souris, so called from the shape of its large lateral prongs which developed a serrated margin like the wing of a bat. These various trident-shaped pole-arms were most numerous in southern Europe. The runka is characteristically Venetian, the korseke appears to have been at home in the Trentino, and the Friauler spiess, as the name suggests, is from the Friulian Alps in the region of Trieste. In general, though, judging from contemporary pictures and materials in early armories, all of these arms seem to have seen active service far from their primitive homes. Thus the chauve-souris is known to have been not uncommon in France and Flanders.

The pole-arm, in summary, was originally a Bauer Waffe, or peasant's arm. It was only after a century or two of use that it began to take a high position as an arm of ceremony. Some of the forms were carried only by officers, and many of the types shown in our galleries are objects of no little beauty both in design and in workmanship. From the later half of the fifteenth century onward their blades were frequently enriched with engraving, bluing, gilding, and inlays of precious metals; and their shafts were carved, sometimes covered with rich brocade, and adorned with gilded studs and tassels. In the last respect some of the most beautiful tassels which have come down to us from the sixteenth century belonged originally to ancient halberds.

It may finally be remarked that the fashion of ornamenting halberds is quite characteristic in different periods. In the examples shown in the label just below the line 1500, the ornamental patterns are usually expressed by series of fine dots punched into the metal: in the pole-arms which are pictured above the line 1500 we are apt to find that the ornaments are etched, and the background filled in by parallel lines; in this, as in the former design, the ornament is often gilded à mercure. About the middle of the sixteenth century the commonest type of ornamentation is etched and filled in with black: in these cases the background shows minute, uplifted dots in clean steel. Toward the end

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of the century, ornamentation by engraving à burin or else by chiseling is common, the background in some cases being boldly sculptured. This fashion of ornamentation appears during the seventeenth century about as frequently as etching, especially in wide-bladed partisans and spontoons. Only in the richest arms of this century, however, is ornamentation apt to occur, but when it does appear it is of the most lavish type, showing gilding, bluing, and inlays of precious metal (assi-

mina): e. g., the wonderful Borghese fauchard in the Riggs Collection.

Throughout the eighteenth century polearms were rarely objects of beauty. Their value had passed away: they were at home neither in camps nor in courts: and in the end they retained hardly a trace of their ancestral glory. To a zoölogist's mind they recall, as a parallel, the sad case of the little rockbound and leathery "sea-peach," which has inherited from its great forebears neither ear, nor eye, nor backbone, nor brain.



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